Table of Contents

Value or Values: Mitigating the Tension of Reporting Success ......................................................................................................................... 09
Rachael Allen, University of Georgia
Jessica L. Holt-Daniels, University of Georgia

FLOCC - Facilitating Online Instruction Certification Course:
A Self-Paced New Online Instructor Workshop ........................................................................................................................................... 15
David Babb, University of North Georgia

Academic Integrity in the Online Classroom ......................................................................................................................................................... 17
Jacob Bane, The Ohio State University

Integration of Competency-Linked Education in an Online Graduate Course
at a Southern Research University ................................................................................................................................................................. 19
Michelle E. Bartlett, North Carolina State University

A Qualitative Study of Student Expectations of Online Faculty Engagement ....................................................................................................... 23
Christopher Berg, Rocky Mountain College of Art and Design
Melanie E. Shaw, Colorado State University - Global Campus
Anthony L. Contento, Colorado State University - Global Campus
Scott W. M. Burrus, University of the Rockies

Supporting Success: Faculty Development for Online Learning ............................................................................................................................... 35
Jesse R. Bishop, Georgia Highlands College

Behind the Curtain: Course Design for Improved Experience and Capacity ......................................................................................................... 41
Jeremy T. Bond, Central Michigan University
Kendra S. Brown, Central Michigan University
Jennifer J. Jones, Central Michigan University

Development of the Online Student Support Scorecard ....................................................................................................................................... 45
Victoria Brown, Florida Atlantic University
Josh Strigle, College of Central Florida

The Cost of Online Education: Leveraging Data to Identify Efficiencies ........................................................................................................... 49
Charity Bryan, Kennesaw State University
Elke Leeds, Kennesaw State University
Tarrica Wiley, Kennesaw State University

eLearning Master You Will Become ................................................................................................................................................................. 53
Alison Consol, Wake Technical Community College
Julie Evans, Wake Technical Community College
Pooneh Lari, Wake Technical Community College
Adrienne Leinbach, Wake Technical Community College

Incorporating Powerful Integrations: Meeting Quality Design Standards in Today’s Learning Management Systems ........................................................................... 57
David C. Dixon, Southeast Kentucky Community & Technical College

Navigating the Shifting Landscape of Distance Education ............................................................................................................................... 59
Russell E. Fail, Purdue University Global
Michele H. Riley, Purdue University Global
Brave New World: Leadership Empowering Faculty During LMS Change ......................................................... 63

Barbara Green, Purdue University Global
Michael W. Keathley, Purdue University Global

Full-Time Adjuncts: Our New Normal........................................................................................................... 67

Barbara Green, Purdue University Global
Leslie Johnson, Purdue University Global

A Spoonful of Sugar: Engaging Online Students with Smore ............................................................................ 71

Barbara Green, Purdue University Global
William Ashley Johnson, Purdue University Global
Stephanie Lewis Thompson, Purdue University Global

The Revolving Door of Writing Across the Curriculum Leadership............................................................ 75

Michael W. Keathley, Purdue University Global

The Sky Isn't Falling: Helping Faculty through Times of Change .............................................................. 79

Michael Keathley, Purdue University Global
Barbara Green, Purdue University Global

Being Bezos or Gates: Business Leadership Lessons and Distance Learning ............................................ 83

Teresa Marie Kelly, Purdue University Global

Alexa…Can AI Enhance Student-to-Content Interactions? ........................................................................... 87

Carol Klemka, Concordia University
Patricia L. Angulo, University of Minnesota College
Annika Moe, University of Minnesota College
Greg Steinke, University of Minnesota College

Guidelines for Cyber Hygiene in Online Education ...................................................................................... 93

Georgianna Laws, Augusta University
Michael Nowatkowski, Augusta University
John Heslen, Augusta University
Sharn Vericella, Augusta University

I-E-O Online: Understanding Today's Online Student at the University of West Florida......................... 101

Maeghen Kuhn, University of West Florida
Karen L Rasmussen, University of West Florida

Towards a Common Data Set for Online Program Management ............................................................... 105

David McCurry, University of South Carolina Upstate

Leading by Innovating Higher Education: LMS Change Management Strategies Designed to Mitigate Student Attrition During a Large-Scale Blackboard Ultra Implementation .................................................. 111

LauraAnn Migliore, University of Phoenix
Scott W.M. Burrus, University of the Rockies
Gregory T. Bradley, University of the Rockies
Melanie E. Shaw, University of the Rockies

Creating Online Community: Tools promoting Choice, Voice and Connectivity ..................................... 119

Bonnie Mullinix, Walden University

The Impact of Faculty Training on Institutional Performance ........................................................................... 125

Crystal Neumann, American College of Education
Jason Caudill, King University
Empowering Faculty in an Increasingly Standardized Online Environment .................................................. 129
Christie Nicholas, University of South Florida
Erin Bryan Sutliff, University of South Florida

Is Economics Changing the Quality of Online Education? .............................................................................. 133
Abbot L. Packard, University of West Georgia
Frances Chumney, University of West Georgia

Effects of an Open Educational Resources Initiative on Students, Faculty and Instructional Designers ............................................................. 141
Anthony A. Piña, Sullivan University
Kenneth A. Moran, Sullivan University

Career Readiness – The Missing Piece ........................................................................................................... 151
Oscar W. Raile, The University of Virginia’s College at Wise

Effective Use of “Guest Lecturers” in Online Instruction .................................................................................. 157
Emily Rogers, Valdosta State University
Howard S. Carrier, James Madison University

Price vs. Cost of Distance Education Enrollment ........................................................................................... 163
Lisa Sedlock, George Mason University

Working Backwards Moves You Forward: Informed Data Collection .............................................................. 169
Kate Senn, West Kentucky Community and Technical College
Kenya Thomas, Jefferson Community and Technical College
Jonathon Berry, Kentucky Community and Technical College

Online Higher Education Executives: A Comparative Analysis of Job Vacancy Postings and Competencies Identified in the Literature .......................................................... 173
Melanie E. Shaw, Colorado State University
David Dannenberg, University of Alaska
Karen Ferguson, Colorado State University
Scott W.M. Burrus, University of the Rockies

Using the Adult Classroom Environment Scale to Evaluate Learner Expectations ........................................ 181
Vincent M. Spezzo, Georgia Institute of Technology
Amanda J. King, University System of Georgia

Secret Boss Training: Get Everyone to Observe Online Courses .................................................................... 187
Thomas J. Tobin, University of Wisconsin-Madison

Growth Management of Distance Graduate Programs: Balancing the Scales Strategically ............................. 201
Carrol Warren, North Carolina State University
Michelle E. Bartlett, North Carolina State University
Diane Chapman, North Carolina State University
Value or Values: Mitigating the Tension of Reporting Success

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Jessica L. Holt-Daniels
University of Georgia

Abstract

Common reporting practices often create significant dissonance between the value and the values of a program. The Online BBA at the University of Georgia has implemented adaptive and creative reporting strategies to reconcile the tension between calculating simple enrollment numbers and communicating our commitment to our students.

Introduction

The title of this paper is actually a misnomer--value OR values. These concepts are not in opposition. The intent of this paper is to allow readers to interrogate the tension between these two concepts and consider their individual roles in educational programs and operations. In the rage for big data and data-driven reporting, we often forget the complex individuals we serve as educators. Inquiring into the similarities and differences allows opportunities to develop strategies that make both the values and the value of our program clear.

Value vs. Values

When one considers the value of a program, it can be challenging to calculate. From the college’s perspective, the value can equal the amount of revenue generated. However, students in the program are more concerned about the value added to their careers and salaries once the program is complete. Both concerns boil down to the question of whether the benefit of the program outweighs the cost. This is an important question; administrators, program staff, and students must continue to ask questions challenging the value of experiences so that they can be good stewards of money, resources, and time.

Considering the values of a program can also be confusing--can a program even have values? It is common for companies and universities to have mission statements communicating the values to which the institution and its employees commit. For instance, the mission of the University of Georgia is “to teach, to serve, and to inquire into the nature of things.” However, a tendency to focus on only one piece of the puzzle leads programs, departments, and divisions to neglect situating mission and values at the forefront of day-to-day operations. A recent study in online education reports that while an institution may value online education as an integral part of fulfilling its mission, it may not be incorporating this valued programming into its formal strategic plans (p.25). It appears that dissonance between an institution’s values and its strategic plans has a strong correlation to one of the largest markers of program success: enrollment.
As Allen, Seaman, Poulin, and Straut (2016) point out, of the institutions with mid-size enrollment (5,000-9,999) and low enrollment (1-4,999), only 45.1% and 43.4% respectively reported that online education was represented in the institution’s formal strategic plan. In contrast, one hundred percent of institutions with large online enrollments (over 10,000) significantly incorporate online education in the institutions’ formal strategic plan (p.46). Therefore, we argue that programs should take the time not just to focus on reporting their value, but define, commit to, and report on the values of the program while actively considering the mission of the institution as a whole. Institutions dedicated to the success of their online programs should follow suit.

Our Values

The values of the Online BBA program at the University of Georgia are the same as the university as a whole—to teach, to serve, and to inquire into the nature of things. However, in order to effectively pursue this mission, the program needed a guiding principle. We are not the cheapest, fastest, nor the most flexible program; we realized that in order to stand out in the market, we needed to provide the best customer experience possible. And we were good at that. Therefore, based on the personalities and strengths of the program staff in conjunction with the needs of the market, the motto “Commit to the student” emerged. This motto is not unique or groundbreaking by any means, but the ways in which we teach, serve, and inquire into the nature of things is entirely changed by this one simple concept.

Reporting Practices

Reporting practices have always been a stressor for this program coordinator.

No question was ever simple; most conversations went much like this:

Administration: “How many students do you have in the program?”

Program Coordinator: “Do you mean ‘how many students are active?’ or ‘how many students are enrolled this semester?’ or ‘how many students are paying the differential?’ or…”

After some consideration, we realized that our frustrations were not because we lacked the right answers, but rather because we felt that we were not able to communicate our values. Our reports assessed all the major statistical benchmarks; however, they were not communicating what we believe to be the “important” things. In our minds, successful integration of values into a program’s day-to-day operations adds value to our program. However, communicating this idea to administration—that a program has value beyond its numbers—is a difficult task and has led to reporting practices that omit the assessment of the implementation of program values. Thus, necessity required that we develop a creative reporting strategy that would allow us to assess and report the program’s ability to actualize its values.

Values-Driven Reporting

We had to ask the question: what does it look like to report on a program when the program’s main commitment is to the student? We turned to the world of research to incorporate the qualitative methods of ethnography and story-telling to figure out creative ways to serve our student population. Ethnography is one of the cornerstones of qualitative research; it is a method of cultural study, often including some level of immersion in the culture, originating from the field of anthropology. The reality of ethnography is that it is messy work; cultures are not easily observed in their entirety or reduced to their common interests. Following Van Maanen (2011), we believe that “ethnographies are portraits of diversity in an increasingly homogeneous world” (p.xvii). It is the same with students. Working with this program has been an immersion in the culture of students who want to complete their degree. After several years of involvement, we did not have a profile for the “typical” Online BBA student. What we learned was that each student had different reasons for returning to school and conditions under which they were doing so. Therefore, we realized the need to start telling their stories—each and every one of their stories.

Values-driven reporting means that we use reporting as a teaching tool. We use our reports to educate administration and other campus constituents that these students are not just numbers. Their situations are complicated; their stories are meaningful. In the beginning, we reported a multitude of numbers in an effort to demonstrate the complexity of the program population.
Our tactic to report so many numbers was not received as intended, however; per administrative request, our reports became smaller and less complex. Therefore, we have had to find other ways to report the complexity of our program as it pertains to our values, not just the perceived value.

We believe that we could commit to our students in the following ways and use these as opportunities for creative reporting:

- Committing to students before they are students
- Sharing student stories through our student profiles
- Placing a strong emphasis on advising

**Committing to Students Before they are Students**

Since we value the individual, we spend a lot of time teaching prospective students how to navigate admission processes, putting them in touch with appropriate resources, and spending time making sure they understand.

We do this through:

- Weekly informational webinars
- Purposefully detailed emails and phone conversations
- Personalized degree path recommendations and transcript reviews
- Partnerships with other institutions who can meet the immediate needs of the student

Student profiles are an important way that we communicate who our students are and that their stories matter. Rather than send the profiles straight to administration, we use these as marketing tools. These are marketing tools that still maintain our values. We take the time to create a story about each student and then share it in our newsletters, on social media, and allow other UGA marketing channels to use it. This makes the student feel like they matter to us and it helps them be proud of their stories, no matter how many twists and turns it may have taken. In turn, it shows that our program and UGA is committed to our students. Additionally, these student stories allow others to, perhaps, see a bit of their own story in it.

Here are just a few samples of the student stories we have been able to tell:

- 40 Years Later, Susan Swann Jumps Back into School with Online BBA: [https://online.uga.edu/node/5477](https://online.uga.edu/node/5477)
- David Hall: Reaching His Goals from 35,000 Feet: [https://online.uga.edu/node/5453](https://online.uga.edu/node/5453)
- Isaac Brown Strives to Inspire his Daughters to Succeed: [https://online.uga.edu/node/5441](https://online.uga.edu/node/5441)
- New Mom, Maddi Buchanan, Keeps School at the Top of her Priority List: [https://online.uga.edu/BBA-New-Mom](https://online.uga.edu/BBA-New-Mom)
- Former Football Player, Rennie Curran, Has New Game Plan to Finish his Business Degree: [https://online.uga.edu/node/5327](https://online.uga.edu/node/5327)
- Lorretta Arrington Combines Military Experience with BBA Degree to Command her Career: [https://online.uga.edu/node/4690](https://online.uga.edu/node/4690)
Strong Emphasis on Advising

Academic advising provides a unique opportunity for programs to both integrate their values into daily operations and also evaluate and report their ability to do so. Advisors create environments in which students can be educated, supported, and empowered. For example, when advised, students gain knowledge about admissions, degree, and graduation requirements. This makes them more likely to see a clear path to success and be able to effectively problem solve as they move through the process of completing their degree. In the Online BBA, we believe that these positive student outcomes are, at least partially, a result of continuous dialogue between student and advisor and also the use of descriptive and detailed advising records. When we engage in consistent communication with students and record these interactions, we are able to craft a narrative for each individual student. We can see students and their experiences from a holistic perspective and can respond to them in their entirety.

Ultimately, these advising narratives allow programs to examine student experiences and reflect on the program’s responses to students’ circumstances. Thus, advising provides the opportunity to evaluate and report on the ability of a program to effectively incorporate its values into its daily operations. Both administrators who advise for the Online BBA program have received 100% satisfaction on their advisor evaluations for the entirety of their tenure with the program. We believe positive student feedback is a strong indicator of the value students place on this program and proof we are living out the program values.

Conclusion

Reflection is a necessary part of inquiring into the nature of things. Therefore, the practice itself of considering the differences between value and values for an online program is in line with the mission of our institution. All programs could benefit from wrestling with the difference between the value of a program and the values of a program. There is a clear symbiotic relationship between these two seemingly different concepts; when the values of a program are clearly expressed and lived out, it can increase the overall value of the program. Reporting practices are often regulated to the point that one feels unable to communicate the additional value that numbers cannot define. Finding alternative ways to report these values through research and storytelling shows that focusing on values and not just value allows the opportunity for multifaceted success.
Here are some questions for administrators to consider in order to make their program more values-driven:

- What is the overall mission of your institution?
- If that mission is broad, what guiding principles can you use to focus your efforts? Can you make them into an easy to remember, repeatable reminder?
- What are some of your day to day tasks and responsibilities? How would those tasks change in light of your guiding principles?
- When you report value/progress/status, what value added information is missing?
- How can you report your progress in a way that highlights your programs guiding principles? Will you have to use unconventional means?

References


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FLOCC - Facilitating Online Instruction Certification Course: A Self-Paced New Online Instructor Workshop

David Babb
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Abstract

What do you do with multiple new online faculty each semester, all of whom need training in online pedagogy and technology? The University of North Georgia has developed a self-paced fully online workshop to onboard new online faculty quickly and efficiently. The FLOCC workshop prepares an incoming instructor to teach online in any of our disciplines in an accelerated time frame. This paper outlines the methods used to achieve our prodigious goal.

Introduction

UNG Online manages all online courses offered through the academic departments. We have continued to experience rapid growth in our student population and online course offerings. How is UNG Online able to sustain these rapid growth figures? Through continual hiring and training of new online faculty.

Online course offerings at UNG have increased considerably with a 19% increase from 2013 to 2014, and a 12% increase from 2014 to 2015. As of spring 2016 there were 577 online course offerings.

The same highly qualified faculty who teach face-to-face classes at UNG also teach our online classes. UNG Online trains new adjunct online instructors each semester as well as face-to-face instructors transferring to teach partially or fully online.

How Faculty Development Supports Rapid Growth

The role of the Faculty Development division in UNG Online is to educate new online instructors in the best practices in online pedagogy and to train them in the use of our Learning Management System, LMS. This ensures high quality online course offerings to our students.

The FLOCC workshop is completed fully online and at the individual pace of the student. Facilitators are available through email and face-to-face, as required. Once oriented to the FLOCC workshop, where faculty are students, they complete assignments that require them to be instructors in a “FLOCC Sandbox.” Each faculty/student works at their own pace and typically completes the course within eight to ten hours.

The FLOCC Workshop Components

All UNG Online Faculty are Required to Complete the FLOCC Certification Before Teaching Online.

Teaching online involves more than just transferring your in-class documents from print to online. The dynamics of an online course depend heavily on the way course materials are organized and presented. The interaction of student with content, instructor with student, and students with students, are significant factors in a successful course.

Enrollment in the FLOCC workshop: https://forms.ung.edu/view.php?id=187839

The Facilitating Learning Online Certification Course...

... is self-paced and provides faculty with the competencies to teach an online course for UNG.
... focuses on theory, concepts, and practices for effective online facilitation in addition to UNG specific information.
... does not focus on teaching specific skills related to the LMS (Learning Management System) or other software.

Successful Completion of FLOCC Provides Faculty with the UNG Online Teaching Certification

The main components of the course include:

- **Start Here Module** - Including the Syllabus/Schedule, Welcome, and Introduction discussion.
- **Content Modules** - Presented in a consistent layout/navigation. Students are able to focus on content/activities rather than locating material.
- **Overview** - Topics delivered via presentations, readings, online resources, and activities.
- **Readings** - Reference readings that focus on the module topic and pedagogical issues.
- **Activities** - Related to the topic/subtopics to provide examples, demonstrations, and models.
- **Resources** - Additional links and bonus materials to continue active learning.

Participants Must Have...

- Access to a Browser. Recommendations: Mozilla Firefox, Chrome, or Safari
- Basic computer skills and software applications, including use of web browsers and web navigation
- File management, including uploading and downloading various file formats.

The FLOCC Process

1. Each semester new online faculty are hired, as well as face-to-face faculty teaching online for the first time. UNG communicates closely with each department on new online instructors and have a “FLOCC Workshop Enrollment Request” form which is completed to enroll in the FLOCC online workshop.
2. After faculty are enrolled in the workshop and Sandbox students are encouraged to review the FLOCC website page that explains the workshop and its components.
3. The FLOCC workshop includes the reading, videos and assignments that must be completed in the FLOCC sandbox.
4. After completing the workshop, students must complete a survey that informs UNG online we can begin reviewing their assignment submissions.
5. The FLOCC facilitator reviews the assignments and contacts students who need additional assistants and training to complete the workshop.
6. When successfully completed faculty and department heads are sent a certificate that they have completed the minimum requirements to teach online.
7. The FLOCC workshop is a living course and is updated continuously with new best practices and suggestions from the end of course surveys.

Conclusion

Per UNG's Faculty Handbook. 8.4.1

All faculty teaching fully online instructors will be certified either through prior experience or through the Distance Education & Technology Integration (DETI) certification process; this includes a self-paced course on teaching online. In support of this policy, the above-mentioned processes have been developed so that this goal is met. But, it goes beyond this, as we know continued training and professional development is paramount in providing a quality education to our student body.

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Academic Integrity in the Online Classroom

Jacob Bane
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Abstract

As distance education grows, so does the need to ensure student identity and academic integrity. The Ohio State University used a dual approach to ensure academic integrity across its distance education offerings, employing a virtual proctoring solution and faculty education on authentic assessments. The process to select a virtual proctoring solution is ongoing and faculty education on authentic assessments will be handled through the Office of Distance Education and eLearning. A solid foundation will be set with this initiative, and further development will continue to meet the needs of a changing educational landscape highlighted by the Digital Flagship Initiative at Ohio State.

Main Text

The need to ensure student identity and academic integrity is a paramount issue across education. This issue is not new, but it has been brought to the forefront by the continued expansion of distance learning. Not only is academic integrity important for student learning, it is mandated by law. The Higher Education Reauthorization Act of 2008 requires institutions to verify a student’s identity by using methods such as: a secure login and pass code, proctored examinations; and new or other identification technologies that are effective in verifying student identification (602.17, 2009). It also states that institutions “…must use processes that protect student privacy and notify students of any projected additional charges associated with the verification of student identity at the time of registration or enrollment” (602.17, 2009).

In accordance with this mandate, The Ohio State University needed a tool which ensured the integrity of our degrees, promoted sustainable growth, could exist alongside other tools in our academic integrity toolkit, and met the expectation of transparency around student costs at the time of course registration. This was not only an expectation of the U.S. Department of Education and the Higher Learning Commission, among other specialized accrediting bodies, but would ensure confidence in our academic integrity initiatives. For these reasons, the campus community requested a university-recommended virtual proctoring solution.

The need for a virtual proctoring solution was identified, however Ohio State wanted to go beyond the implementation of a virtual proctoring solution and offer faculty education on authentic assessments. The goals of this education were to include more authentic assessments across Ohio State course offerings and to ensure that faculty were not seeing the virtual proctoring solution as the sole solution to ensure academic integrity, but as a tool in their assessment toolkits. This was an opportunity to infuse best practices and sound instructional design across Ohio State course offerings.

To begin the search for a virtual proctoring solution, Ohio State submitted a Request for Proposal (RFP) for a virtual proctoring pilot Spring 2015. A subsequent request for information was required during this process and the RFP committee selected Proctorio. In partnership with Proctorio, Ohio State conducted two pilots during Spring and Autumn 2016. The pilots encompassed four courses, 310 students and seven exams. Faculty and students provided largely positive feedback.

Following the successful pilots, Proctorio underwent accessibility and security reviews by Ohio State. Proctorio representatives proved very open to working with Ohio State experts to adapt and improve their platform. The Ohio State Steering Committee received a progress update in Spring 2017, and the members recommended an enterprise deployment of a virtual proctoring tool. To move towards the enterprise deployment of a tool, it was necessary to create a new RFP. Ohio State launched an enterprise level RFP Spring 2017 which is ongoing.
During the RFP process, Ohio State is prioritizing a full integration into the Canvas learning management system which is used by Ohio State. Beyond this integration, the university community has requested an on-demand, no scheduling required, software-based solution that does not have a live proctor component; a live proctor was seen as invasive by pilot participants.

When the virtual proctoring solution is selected it will be deployed enterprise-wide. With an eye toward authentic assessment education, training will cover more than how to use the tool. A new academic integrity workshop will be developed and offered to the campus community. The new session will be broken into three parts: academic integrity principles such as authentic assessment, the Canvas Quizzing tool and finally, the virtual proctoring solution. The new workshop will be offered via face-to-face and virtual mediums and will share authentic assessment techniques already deployed across some of the fully distance education programs at Ohio State.

Adding intrigue to the academic integrity initiative is the deployment of the Digital Flagship Initiative at Ohio State. This initiative was announced in Fall 2017, during our proctoring RFP process. The initiative will provide all Ohio State undergraduate students iPad Pros with the Apple SmartKeyboard, the Apple Pencil, and a suite of iOS apps starting with first year students in Autumn 2018 and for each subsequent incoming class. Currently, there is no full-scale virtual proctoring solution available via Apple’s iOS platform. Ohio State is striving for one virtual proctoring platform that can be used across all devices in the future. With this goal in mind, Ohio State will work to facilitate conversations between virtual proctoring vendors and Apple.

The technology landscape is in constant transition. Despite challenges, Ohio State will have laid a strong academic integrity foundation across the institution. Our approach focuses on incorporating a technology solution alongside best practices in authentic assessment. This groundwork will allow Ohio State to meet the demands of a fast-paced and adaptive education environment.

References


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Integration of Competency-Linked Education in an Online Graduate Course at a Southern Research University

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Abstract

The goal of integrating the competency-linked education model in the online graduate course was to link the curriculum and course activities with competencies from an accepted international organization in the field giving students increased labor market outcomes when they graduate and enter the workforce. Ye, Van Os, Chapman, & Jacobson (2017) proposed, “In today’s rapidly changing work environment, there is a growing demand for business educators to prepare graduates to adapt to the challenges of the marketplace. As the marketplace becomes more competitive, the expectation for newly hired employees to add value to the organization immediately and also demonstrate long-term career potential is only increasing.” This paper will discuss successes, challenges and opportunities of integrating competency-based education in an online graduate course.

Background

A fully online Master’s degree in Training and Development at a southern research university has a robust curriculum with courses from analyzing training needs, designing, delivering, and evaluating training, and leadership. However, the program was missing a project management course. With funding from a DELTA grant, the program coordinator of the Master’s in Training and Development and a team of instructional design experts created a competency-based online graduate course in project management.

Our Definition of Competency-Linked Education

Competency-Linked education falls within the spectrum of competency-based education. Book (2014) states there is not a definition of competency-based education and that several different models exist. Since there are so many different models, it is important to adequately describe our model for clarity. Soares (2012) stated, “With a competency-based approach, you do not begin preparing a course syllabus by identifying content and readings. Instead, you begin by identifying competencies and then select the content, readings, and assignments to support student attainment of those competencies” (p. 2).

The U.S. Department of Education (n.d.) stated, “By enabling students to master skills at their own pace, competency-based learning systems help to save both time and money.” Our competency-linked education course stays the same in terms of time to complete and cost to take the course. While many colleges adopting competency-based education focus on a self-paced model, our program is still in semester format. Students still take the required 12 courses to earn the master’s degree and each course runs on a 16-week semester in Fall and Spring and a 5-week course in Summer I and Summer II semesters. Rather, the goal of integrating competency-linked education in the online graduate course was to significantly improve the impact on labor market outcomes for students when they graduate and enter the workforce. Similar to the National Association of Manufacturers’ Manufacturing Skills Certification System discussed in Soares (2012) our program seeks to “bridge the worlds of workplace competencies and postsecondary education,” (p. 10) so that students are best prepared with the skills needed to enter the workforce. Rather than students saying, I received a specific score or letter grade, our students will be able to list competencies they are deemed proficient in. Competencies are linked to all deliverables (see Appendix A).

Krause, Dias, & Schedler (2015) stated, “Because competency-based courses are often self-directed and self-paced, there are no requirements for introductions, class communications, and direct instruction.” Which supports the reason why our competency-linked education course deviates from the typical definition of competency-based education. In our online program, we place a large emphasis on building community among peers, keeping our
students engaged with peers, instructor, course materials, and the community through interactive and innovative technology and best practices. We follow the Model for Engaging the Online Learner (Bartlett, 2017).

With a focus on course, peer, instructor, program, and community engagement it is imperative that the faculty remain engaged throughout the course as more than just tech support. Our program also focuses on the students’ technology efficacy, ability and self-perceived ability to use the technology needed to navigate through the courses. The program is focused on building practitioners with the knowledge, skills, and abilities to enter the workforce, which can be seen in the model under applicability. We believe students will thrive in the classroom when they are able to apply what they have learned outside of the classroom.

**Why Competency-Linked Education**

**Figure 1.**
*Competency-Linked Course Graphic*

Corporations are increasingly spotlighting that students who graduate from higher education institutions are not entering the workforce with the skills needed to successfully complete their job. Johnstone & Soares (2014) stated that competency-based education, “builds a bridge between academics and employers, resulting in a better understanding of the knowledge and skills that students will need to succeed in work and in life” (p. 14). Competency-linked education, within the competency-based education spectrum, helps to ensure mindful course design, curriculum selection, and the creation of deliverables that will teach or increase skills needed by linking each activity (required reading, assignment, discussion forum, etc.) to a competency. The competency-linked online graduate course format has the potential to ensure graduates are entering the workforce with skills they can demonstrate on their resume and in action that will make them high quality hires.
Challenges of Competency-Linked Education Integration

Challenges Include:

- Developing competencies or finding existing competencies and then linking assignments to the competencies
- Training faculty in how to grade and give feedback using the competency-linked model
- Time to transition course(s) to the new model, linking all activities to the competencies rather than learning objectives

Successes of Course Design

Successes Include:

- Graduates finish the course with a list of mastered skills
- Linking potential employer needs with skills gained
- Shows progress for students to know how they are doing as they move toward proficiency in the competency

Conclusions

Integrating competency-linked education into the online graduate course has helped ensure practical application linkage from assignment to practice in the workforce. Competencies for the online graduate course were integrated by aligning already existing competencies proposed by a large, well-respected, international organization in the field.

References

Bartlett, M. E. (2017). Integration of E-Service Learning in an Online Graduate Course, Society for Information Technology and Teacher Education 28th International Conference, SITE, Austin, TX.


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A Qualitative Study of Student Expectations of Online Faculty Engagement

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Abstract

Institutions offering online courses and degrees often develop requirements for faculty to student interactions; yet, these requirements may not align student preferences for faculty engagement. This research expanded the work on an earlier study by Shaw, Clowes, and Burrus (2017), *A Comparative Typology of Student and Institutional Expectations of Online Faculty*. The current study included a new sampling of 57 students across two institutions focused on their experiences in online courses. Using the original typology as a lens, results were grouped into themes including substantive feedback, timeliness, and course expectations. Recommendations for further study include conducting a quantitative study of the relationship between faculty outcomes and student satisfaction after implementing student performance expectations.

A Qualitative Study of Student Expectations of Online Faculty Engagement

Higher education institutions across the country have expanded to meet student demand for online programs and courses (Allen & Seaman, 2013). Institutional leaders are challenged to develop expectations for faculty around student engagement to ensure best practices and student needs are fulfilled. With student retention closely tied to student satisfaction, studying strategies enhance student experience, engagement, and enjoyment in the online academic setting can have important consequences for institutions. This research study was an expansion of a previous study, *A Comparative Typology of Student and Institutional Expectations of Online Faculty* (Shaw, Clowes, & Burrus, 2017). The original study arose after numerous discussions with online faculty who shared institutional expectations of performance, which often differed from the literature on student perceptions of quality faculty performance. Student satisfaction is an essential element that should drive faculty mentoring approaches (Izadina, 2016); yet, there was a gap in the literature relative to the role of student experience as a driver of faculty expectations.

The following research questions that drove this study were:

1. What are student expectations for online faculty engagement relative to substantive feedback, timeliness, and course expectations?
2. What are student expectations of the requirements institutions should have for online faculty in terms of student engagement?

Theoretical Framework

Engagement Theory was used as the theoretical lens through which the data were evaluated. Engagement Theory was developed as a framework for technology enhanced teaching and learning (Kearsley & Schneiderman, 1998).
As such, it is particularly relevant to the online setting. For meaningful learning to occur, students must be engaged in activities and interaction with others throughout the learning event. Our view of Engagement Theory relies on the experience of students interacting online through technology as a means of engaging in learning (O’Brien & Toms, 2008). Engagement Theory often requires relational components such as communication and social skills (Miliszewska & Horwood, 2004).

**Literature Review**

To ensure standards of faculty performance, many institutions dictate expectations that faculty must meet on a regular basis such as grading timelines, online course engagement, and student communication practices via course expectations. Online faculty members are often expected to comply with these expectations as a condition of continued employment. In the original study by Shaw, Clowes, and Burrus (2017), an exploration of the gap between expectations of the institution regarding faculty-to-student engagement and those of students was conducted. In that research study, a typology was developed whereby institutional expectations for online faculty-to-student engagement were grouped into themes. Then, an analysis of qualitative student feedback regarding their expectations for online faculty was sorted into those typologies to add rich experiential depth to the typology. Based on the findings, recommendations were made regarding the types of expectations institutions should have for online faculty to maximize student satisfaction with faculty engagement. The findings showed students and institutions diverged on several areas of the typology. Table 1 includes a comparison of these results.

**Table 1.**

*Typology of Institutional and Student Expectations of Online Faculty (Shaw, Clowes, & Burrus, 2017)*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Institutional Expectations</th>
<th>Student Expectations</th>
</tr>
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</table>
| **Substantive Feedback** | • Detailed feedback  
• Personalized comments  
• Rubric utilization  
• Focus on academic growth | • Detailed feedback on work regardless of quality  
• Consistent and clear feedback  
• Personalized, not *canned* feedback  
• Feedback on content, not formatting  
• Share expert knowledge |
| **Timeliness** | • Grading timelines  
• Frequency of LMS log in  
• Responsiveness requirements  
• Final grade timelines | • Follow or exceed institutional expectations for timelines  
• Grades returned on previous work before next work is due |
| **Course Expectations** | • Required posted content  
• Required student interaction  
• Required contact and/or office hours | • Relevant, updated and well-functioning courses  
• Consistence across course structures  
• Consistent expectations of faculty across courses  
• Guidance on course content |
After the institutional and student expectations were compared, some substantive differences were noted. Specifically, students found additional areas of importance for faculty engagement. Students commented more frequently on consistency, feedback types, and the desire to engage with faculty on their areas of expertise above the content of the course. While institutions had specific requirements for faculty engagement, students were less concerned with specific prescriptive approaches to timelines, feedback, and course expectations as they were with consistency, personalization, and faculty adherence to policies. These qualitative comments further substantiate the subtle differences in the findings of the findings (Shaw, Clowes, & Burrus, 2017).

Students appreciated course consistency in terms of navigation and consistency in the quality of faculty support provided across courses. Students generally felt that some instructors were more effective than others and that the institution should do more to promote a more standardized experience for the student in terms of faculty engagement, expectations, and grading practices. Students clearly indicated that all instructors should be held accountable to the same high standards (Shaw, Clowes, & Burrus, 2017).

Students appreciated faculty accessibility and responsiveness. While institutions did state requirements for timeliness of responses from faculty to students to certain triggers, such as questions posted in the course, accessibility of faculty seems to be a more elusive theme than is currently captured in those requirements. Students desire faculty who are prompt in their responses, but also who tailor their responses to student assignments and needs. Students also indicated that because of the nature of online education, they want faculty to be available outside of the typical academic schedule. They want access to faculty during ‘off hours’ (Shaw, Clowes, & Burrus, 2017).

Student responses imply they expect faculty to have total management over the content of online courses. Students expect their courses should function correctly with active links, current resources, and navigable structure, this theme was less of a focus for institutions. It is possible that instructional designers or master course shell development teams are seen as owning this aspect of engagement as perceived within faculty purview by students. In addition, students indicated they want content updated regularly, yet many institutions have scheduled times for course revisions that may require a shelf-life of 24 months or longer for current online offerings (Shaw, Clowes, Burrus, 2017).

Student satisfaction has become a high priority among college administrators (Noel-Levitz, 2014). Student perceptions of effective instructor engagement are an important consideration for educators. Student satisfaction is positively correlated with instructor communication, responsiveness, encouragement, accessibility, and professionalism (Bolliger, 2004; Kauffman, 2015). Effective faculty feedback and engagement is correlated to positive outcomes for students. Students showed greater levels of satisfaction with the instructor and performed better academically when they received personalized interactions from the instructor on assignments (Gallien & Oomen-Early, 2008). Faculty characteristics and behaviors, particularly faculty actions that engage students in distance environments, can directly contribute to student satisfaction (Kuh & Hu, 2001). Another factor to consider is perceived learning. Faculty engagement and student interaction in online courses both have a significant effect on student perceived learning (Costley, 216, p176; Gray, 2016, p13). The perception of learning was found to be distinct from student satisfaction.

**Methodology**

A qualitative research design was used to explore the experiences of college students through a survey and, for further clarification and/or elaboration, open-ended questions. Participant responses to the survey were analyzed using the comparative typology of institutional and student expectations from Shaw, Clowes, and Burrus (2017). Survey data and open-ended questions were used to “provide meaningful additional detail to help make sense out of and interpret survey results” (Patton, 2014, p. 230). The survey consisted of seven questions.

The first five questions (Q) “probed students” academic background and preferences while the final two questions were open-ended.

1. Are you 18 years of age or older and have you participated in at least one online course?
2. How many online classes have you taken?
3. Which do you prefer: online learning or face-to-face, traditional learning?
4. What year of college are you currently in (Freshmen, Sophomore, etc.)?
5. What is your proposed major of study (humanities, nursing, natural sciences)?
6. Please use the text box below to describe your expectations of faculty engagement in the online classroom. Please consider any factors you wish to address in your response. Factors may include assignment grading, timely communication, faculty engagement, faculty presence, faculty office hours, etc.
7. What should the institution require of online faculty in terms of student engagement?

Setting and Recruitment Procedures

Participants were drawn from two public state colleges in the southeastern United States. These institutions grant associate and bachelor’s degrees and serve approximately 50,000 students on-ground and online. Institutional Review Board (IRB) approval was received from both institutions before students were recruited in August/September 2017. The IRB boards approved the recruitment letter used as a Canvas (the learning management system) course announcement and the form of an incentive to interested participants—ten bonus points applied to a discussion forum of their choosing.

The recruitment sites were chosen by the authors due to them being the home institution of one of the co-author’s and because of the diversity and representation of online students in the region. The survey was administered using SurveyMonkey. The Canvas course announcement of the recruitment letter was posted in the following seven online course sections in November 2017: two “modern U.S. history” courses, two courses of “History of World Civilizations, ca. 1815-Present,” one course of “History of World Civilizations, ca. 1500-1815,” one course of “Western Civilization I,” and one “Western Civilization II” course. These were all general survey courses and met the general education requirements from both institutions. The U.S. history surveys had approximately 30 students enrolled whereas the rest had approximately 25 students for an approximate total of 185 initially-registered students with a 31% response rate. The survey was closed in early December 2017.

Results and Discussion

For students to be considered for this study, they had to meet the following criteria: are 18 years of age or older, affirmed Informed Consent, and participated in at least one online course. One student’s responses were invalidated by SurveyMonkey’s analytics; however, upon inspection, the student had incorrectly answered question #1 as “no” when they meant “yes” because they were, in fact, over 18 years of age at the time of the survey. All responses (N = 57) were used as data in the analysis stage.

Question 2: How many online classes have you taken?

In response to question #2, student responses varied widely from taking only one online course (four students) to as many as 20+. Some responses provided a numerical range. For example, student #3 said they took “roughly around 10-12 courses” and student #7 noted “between 7 and 10.” In these cases, the researchers averaged these numbers and included that value in the calculation of the mean. In other cases, student responses were vague. Student #24, for instance, responded, “I have taken more than 5 online courses” and student #51 noted “~10.” Because of the anonymity of results, the researchers were unable to clarify responses of these kind; therefore, the values included were taken at face value, even when the response indicated a higher number of online courses. Taking these factors under consideration, the sample mean was 5.9 online courses per student.

Question 3: Which do you prefer: online learning or face-to-face, traditional learning?

When considering which delivery method (online vs. on-ground) students preferred, the margins were close with 54% (n = 30) favoring online learning and 48% (n = 27) on-ground instruction.

Question 4: What year of college are you currently in (Freshmen, Sophomore, etc.)?

In response to question #4, students overwhelmingly self-identified as sophomores (59.65%) with 22.81% as Juniors, 14.04% as Seniors, 3.51% as Freshmen, and 1.75% as graduate students.
Question 5: What is your proposed major of study (humanities, nursing, natural sciences)?

Students’ declared program majors (question #5) included the Natural Sciences ($n = 13$), STEM ($n = 10$), Nursing ($n = 9$), General ($n = 8$), Social Sciences ($n = 5$), Pre-Professional programs ($n = 4$), Business ($n = 3$), Humanities ($n = 3$), and Education ($n = 2$). Several students indicated that they were soon transferring to another college/university and included their envisioned program of study if it differed from their present course of study. Student #52 said, “Criminal Justice currently, Environmental Studies later” and, similarly, student #55 observed, “My major is general studies. But I plan to major in Engineering at FGCU.” For the purposes of this study, however, we only included students’ current program major.

Question 6: Describe your expectations of faculty engagement in the online classroom. Please consider any factors you wish to address in your response. Factors may include assignment grading, timely communication, faculty engagement, faculty presence, faculty office hours, etc.

This research question was addressed through an open-ended interview question to gauge what expectations students held concerning faculty engagement in the online classroom and, specifically, what factors they found to be significant in their personal success in online education. Shaw, Clowes, and Burring’s (2017) comparative typology guided the coding process and data analysis.

The following three themes were used to categorize faculty engagement:

- Substantive Feedback
- Timeliness
- Course Expectations

Theme 1: Substantive Feedback

Student expectations of faculty engagement touched upon matters of “feedback” in participants’ responses 13 times (23%). The way “feedback” was described by participants’ included “constructive,” “reasonable,” “meaningful,” and “consistent.” Student #11 outlined feedback in these terms: “I would expect reasonable feedback on every assignment, what I’ve could’ve done better…” The response given by Student #28 aligns with Student #11’s and extends it by adding the qualification of “consistent feedback” so that the student could improve from assignment to assignment. Building upon this understanding of feedback, Student #15 observed that “Clarity is essential in the online environment because of the lack of personal face to face contact and the nuanced opportunities for feedback it offers which is an unavoidable characteristic of the electronic format.” One student touched upon “canned” responses as a poor substitute for sharing expert knowledge in discussion boards, stating, “[The] Professor should also engage in your discussion posts and give feedback specific to that student opposed to a pre-drafted comment.”

In addition to feedback being “consistent” and “reasonable” in scope, Student #46 suggested that grading and feedback should be balanced and not unfairly weighted towards scholarly conventions and style: “I want the grading to be fair, as in I do not want to fail an assignment for not using the proper citations…” In terms of how grades are calculated, one student asked for transparency in the form of a rubric that visually reflects where points were deducted, noting an “explanation of grade (a rubric at least with how many points were received in each area)” would facilitate opportunity for improvement. The “substantive” nature of feedback, however, was not commonly shared among participants; as noted above, students were more concerned about specific areas of feedback, e.g., clarity, personalization, and transparency, rather than the overall substantive nature of feedback.

Theme 2: Timeliness

Of the typological themes considered in this study, “timeliness” was the most significant in terms of response rate ($n = 34$). Key words, such as “timely” (27 times) and “prompt” (5 times), were referenced often by participants when describing communication between student and professor. Shaw et al.’s (2017) comparative typology operationalized “timeliness,” generally, in terms of grading turnaround, however, the majority of participants in this study understood “timeliness” in terms of “communication.” Student #38, for example, said “As long as there is good timely communication with professors who teach online classes my expectations have been met.” Similarly, Student #7 remarked, “When a professor gets back to me in a timely fashion I feel that learning comes easily.” Student #2 concurred, saying, “I expect them to use good communication…because a lot of the time, online courses
are taken by people with busy lives…If this is the case, any questions they have should be answered in a timely manner….”

How participants understood “timely” and “prompt” was generally consistent in their range of 1 to 3 days. Student #14, for instance, observed, “I expect the teacher to grade assignments within 3 days of the due date and timely communication.” Likewise, Student #49 stated, “…communication is very important to me. If I have a question I appreciate when a teacher gets right back to me within 1/2 days.” Some students, however, appreciated a tighter response window of 24 hours: “Professors should be quick to respond during office hours, somewhere around a 24-hour response time for emails” (Student #46). Student #40 agreed, noting “I expect professors to be responsive to student questions and to send reply emails within 24 hours,” as did Student #16, who said, “I expect professors to be responsive to student questions and to send reply emails within 24 hours.”

A significant finding in this theme was 29% of participants (n = 10) acknowledged faculty excellence in student engagement. Student #3 was pleasantly surprised by the performance of their professors that semester, noting, “Honestly…speaking on this topic I feel as if the professors I've had this semester all did a spectacular job at communicating with their students.” Another participant shared, “My expectations regarding faculty engagement have been surprisingly met. My professors have successfully graded my assignments on time, they have always replied to my questions (promptly) and they have been extremely engaged in my learning process” (Student #37). Likewise, Student #55 said, “I thoroughly enjoy the online experience and I have certain expectations of my professors which have all been met.” One participant was a hybrid student, and another had just transitioned from being a traditional to fully-online student that semester. Both participants expressed their level of satisfaction when comparing online course engagement with traditional on-ground courses. For example, Student #30 remarked, “Communication through canvas with the professors is very good and they always respond in a timely manner, sometimes more quickly than professors I have face-to-face classes with.” Similarly, Student #17 commented, “I was surprisingly shocked. I am doing much better in my math course, all but one of my professors are extremely understanding, cooperative, keeps up-to-date…without even knowing truly who they are.”

A second significant finding related to the theme of “timeliness” was how critical communication in online learning was to a student’s success and potential attrition. Several participants referred to the lack of “timeliness” in communication as a “make or break” for them. One participant observed, I strongly feel that the professor's willingness to communicate will make or break my online class experience. When a professor gets back to me in a timely fashion I feel that learning comes easily. On the other hand, I've had a professor just never even bother to respond to students at all and I dropped her course (Student #7).

Another participant shared that timeliness in every aspect of the online learning experience—general faculty engagement—was necessary to their success:

It is this type of active professor participation that is the make or break factor of online classes. To compensate for the lack of face-to-face exposure it is important to me that online instructors have an active online presence. Involvement in discussion forums, prompt replies to questions, and meaningful feedback are elements that keep the online student from feeling like just a name on a computer screen. (Student #33).

These participants believed that professor availability and accessibility were the principal determinants influencing their overall performance in a given class. Further, these students conveyed that professor responsiveness factored more heavily than any other consideration, including their own intrinsic attributes, such as intelligence, motivation, or perseverance. “I feel like anything is achievable in online learning but only if the professor responds in a timely manner,” Student #52 explained. “I have passed every class I have ever taken, with the exception of dropping one because the professor would not speak to us for weeks at a time.” Communication, for these student-participants, was imagined to be fundamental to their success or attrition.

**Theme 3: Course Expectations**

Student expectations of faculty engagement regarding “course expectations” were the least significant finding. Only a small percentage of participants (n = 11) found course expectations—course structure and uniformity across the college/university, clear and consistent expectations for online learning, and technically smooth operation, for
example—a significant factor in promoting engagement. Of the three typological themes examined, “course expectations” were the least significant.

Because the online environment is asynchronous and, often, pre-loaded with course content, students feel that directions and instructions should be clear and consistent. Student-participants observed that clarity was essential but often lacking. “In an online course I expect my professor to have a clear set guideline of the course, so I know exactly what to expect and do. I expect them to regularly update the calendar, so I know what is due and when…” (Student #2). Student #13 concurred that “clear expectations for the course” were important. Instructions for all assignments should be carefully explained, as Student #44 observed, because “…sometimes directions can be unclear in an online classroom.” The course syllabus was noted by several participants to be problematic. Student #35 shared that “a clearly laid out and transparent syllabus” was paramount and that “everything else [beyond that] is just a bonus.” Another student-participant agreed, noting “having a clear syllabus is very helpful” (Student #49).

Some student responses were more emphatic and urgent, such as Student #15, who responded: One point I have found to be critical for economy and potential success in an online class is for the format and expectations of the class to be clearly and logically expressed. Clarity is essential in the online environment because of the lack of personal face to face contact…

For another student-participant, their expectations of online learning and teaching were “the same for a traditional style class” (Student #22). One student-participant lamented that course content and assessments are not aligned: “I honestly had one online class where the quizzes…could not be answered based on the chapter that was read. It [was] as if the teacher did not even make the questions, but got them from online” (Student #34).

**Question 7: What should the institution require of online faculty in terms of student engagement?**

This research question was addressed through an open-ended interview question to gauge institutional standards and mandates for faculty to promote student engagement. Shaw, Clowes, and Burrus’ (2017) comparative typology guided the coding process and data analysis.

The following three themes were used again to categorize institutional requirements:
- Substantive Feedback
- Timeliness
- Course Expectations

**Theme 1: Substantive Feedback**

From an institutional perspective, the majority of student-participants did not consider “substantive feedback” in their responses ($n = 2$). Of the two responses, one was simple, direct, yet vague—“better feedback on assignments”—whereas the other student described greater faculty engagement relative to grading transparency and meaningful comments rather than musings:

To give constructive feedback on assignments where it could be useful and give details backing up their reasoning on why they say or give the grade they give. One professor has repetitive written comments that are not helpful to me as a student such as "hmmm" or "where?" without any other information which then puts me in a position of constantly emailing them to clarify what they are meaning, saying, or the grade I deserved if I got points off for no reason (Student #17).

The professor’s musings, in the above example, frustrated Student #17 because it did little to articulate the rationale for the comment(s) and/or grade, and failed to communicate areas for improvement. This oversight, while harmless on the surface, resulted in undue angst and stress for the student.

**Theme 2: Timeliness**

Student-participants overwhelmingly cited this theme in research question #6. The response rate for Q6 was very high ($n = 34$) but, when student-participants considered the institutional context, the response rate plummeted ($n = 6$). Several respondents cited engaged communication in a “timely manner” but, for unexplained reasons, many who
had affirmed this theme previously were conspicuously silent. Student #1 commented that “replies to student questions within 24 hours” were preferred whereas Student #18 suggested “a 48-hour window.” One student elaborated on the importance of fast turnaround times for grades and student inquiries helped inform student progress: “Timely grading and posting of grades so the student knows how they're doing in the course” (Student #2). Basic computer and technical skills, as Student #19 suggested, should be mandated by all college and university faculty teaching online. Furthermore, faculty should be “proactive” and “understanding” when students encounter “technical difficulties” that are beyond their control.

**Theme 3: Course Expectations**

The least significant finding for Q6 was the most significant finding from an institutional point of view. Responses \((n = 33)\) envisioned an institutional policy that required active engagement with students but what actions, behaviors, and factors student-participants stressed were centered around frequency of communication and interactivity in the course learning management system (e.g., discussion boards and messaging), a comfortable and safe environment for open exchange and dialogue, and course transparency.

Several responses \((n = 7)\) stressed the importance of “weekly” contact, whether through office hours, announcements, or discussion posts/responses. Student #30, for example, commented “I think the institution should require weekly discussion boards for student engagement,” while Student #9 encouraged professors to experiment with “online chatting and send frequent messages throughout the week.” Some responses, however, revealed that some student-participants felt disconnected from their professors.

The faculty should place themselves in the student’s shoes. The student has no knowledge of the subject and is learning it for the very first time. Once the faculty has placed themselves in the student shoes they should really think about the assignments. First, they need to make sure the assignment makes sense. Next, they need to make sure that the students can complete the assignments with the material given to them (Student #33).

Relatedly, another student focused on assignment extensions and broached the concept of a “grace” period: I think that each student should be allowed a grace period. For instance, a student should be allowed to submit a maximum of 2 to 3 assignments late per course without penalty. Life happens and sometimes we can’t get to our assignments on time. Kudos to all of the considerate professors who allow so (Student #40).

Some responses \((n = 4)\) voiced concerns about feeling intimidated by the prospect of looking foolish to either their peers or professor by asking “a silly question” and the consequence of “feel[ing] stupid” (Student #8). This reaction resonated to varying degrees with other student-participant responses who acknowledged that institutions should “make it clear to students that they can feel free to ask any questions” (Student #43). This sentiment was shared by another participant, who explained, “A lot of times students are afraid to ask questions, and if it was required I think it would help” (Student #48). The diversity of responses to this research question indicates the nuanced understanding of what “course expectations” factors matter to students in this study. See table 2 for a summary of the results.

**Table 2.**

*Findings Summarized by Survey Question*

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Are you 18 years of age or older and have you participated in at least one online course?</td>
<td>57 used as “yes”</td>
<td>One student incorrectly responded “no,” data was used</td>
</tr>
<tr>
<td>Q2: How many online classes have you taken?</td>
<td>Range: 1-20+</td>
<td>Mean: 5.9</td>
</tr>
<tr>
<td>Q3: Which do you prefer: online learning or face-to-face, traditional learning?</td>
<td>54% ((n=30)) favor online 48% ((n=27)) favor on-ground</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Year Distribution</td>
<td>Other Information</td>
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| Q4: What year of college are you currently in (Freshmen, Sophomore, etc.)? | Freshmen: 3.51%  
Sophomores: 59.65%  
Juniors: 22.81%  
Seniors: 14.04%  
Graduate: 1.75% | Several students indicated that they were soon transferring to another college/university and included their envisioned program of study if it differed from their present course of study. For the purposes of this study, however, we only included students’ current program major. |
| Q5: What is your proposed major of study (humanities, nursing, natural sciences)? | Natural Sciences (n = 13)  
STEM (n = 10)  
Nursing (n = 9)  
General (n = 8)  
Social Sciences (n = 5)  
Pre-Professional programs (n = 4)  
Business (n = 3)  
Humanities (n = 3)  
Education (n = 2). | Several students indicated that they were soon transferring to another college/university and included their envisioned program of study if it differed from their present course of study. For the purposes of this study, however, we only included students’ current program major. |
| Q6: Please use the text box below to describe your expectations of faculty engagement in the online classroom. Please consider any factors you wish to address in your response. Factors may include assignment grading, timely communication, faculty engagement, faculty presence, faculty office hours, etc. | Theme 1: Substantive Feedback  
Student expectations of faculty engagement touched upon matters of “feedback” in participants’ responses 13 times (23%). | Students wanted “clear,” “constructive,” “reasonable,” “meaningful,” and “consistent” feedback. “Canned” responses were considered a poor substitute for sharing expert knowledge in discussion boards. Feedback should also be balanced and not unfairly weighted towards scholarly conventions and style. Rubrics should be used for transparency in grading, with “substantive” feedback on why points were lost or gained. |
| | Theme 2: Timeliness  
Of the typological themes considered in this study, “timeliness” was the most significant in terms of response rate (n = 34). Key words, such as “timely” (27 times) and “prompt” (5 times), were referenced often by participants when describing communication between student and professor. | Prompt/timely communication was considered to be in range of 1 to 3 days. 29% of participants (n = 10) acknowledged faculty excellence in student engagement. Several participants referred to the lack of “timeliness” in communication as a “make or break” for them. |
| | Theme 3: Course Expectations  
Only a small number of participants (n = 11) found course expectations—course structure and uniformity across the college/university, clear and consistent expectations for online learning, and technically smooth operation. Of the three typological themes examined, “course expectations” were the least significant. | Students wanted “clear,” “constructive,” “reasonable,” “meaningful,” and “consistent” feedback. “Canned” responses were considered a poor substitute for sharing expert knowledge in discussion boards. Feedback should also be balanced and not unfairly weighted towards scholarly conventions and style. Rubrics should be used for transparency in grading, with “substantive” feedback on why points were lost or gained. |
| Q7: What should the institution require of online faculty in terms of student engagement? | Theme 1: Substantive Feedback  
From an institutional perspective, the majority of student-participants did not consider “substantive feedback” in their responses (n = 2). | Prompt/timely communication was considered to be in range of 1 to 3 days. 29% of participants (n = 10) acknowledged faculty excellence in student engagement. Several participants referred to the lack of “timeliness” in communication as a “make or break” for them. |
**Theme 2: Timeliness**
The response rate for RQ6 was very high (n = 34) but, when student-participants considered the institutional context, the response rate plummeted (n = 6).

Students desired 24-48-hour turnaround time for communications. Timely grading was also stressed. Basic computer and technical skills should be mandated by all college and university faculty teaching online. Faculty should be “proactive” and “understanding” when students encounter “technical difficulties.”

**Theme 3: Course Expectations**
Responses (n = 33) envisioned an institutional policy that required active engagement with students centered around frequency of communication and interactivity in the course learning management system, a comfortable and safe environment for open exchange and dialogue, and course transparency. Several responses (n = 7) stressed the importance of “weekly” contact. Some responses (n = 4) voiced concerns about feeling intimidated by the prospect of looking foolish to either their peers or professor.

### Conclusion

It is hoped that this qualitative study, which expanded the results of an earlier research typology, will promote a continuing conversation about the differences between institutional requirements and student expectations in terms of faculty engagement and how faculty and administrators can work together to close any gaps between the two. Any gap can have profound consequences for successful student satisfaction and the success of online programs. Because of the replication of findings and the expansion of the qualitative sampling frame, the researchers are confident that these findings are transferable across institutions offering online degree programs. Based on the findings, recommendations for further study include conducting a quantitative study of the relationship between faculty outcomes and student satisfaction, student success and perceived learning after implementing student performance expectations.

### References


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Supporting Success: Faculty Development for Online Learning

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Abstract

Supporting online faculty presents unique challenges in the field of faculty development. This paper provides an abbreviated case study of newly established Center for Excellence in Teaching and Learning (CETL) at mid-size, regional access institution. Specifically, this paper addresses the context of online learning, rationale for a CETL, faculty input, programming, and data-driven decision making.

Introduction

Faculty development for online learning is a newer area within the larger context of educational development. Centers for Teaching and Learning are responsible for developing all faculty at higher education institutions (Gillespie & Robertson, 2010). With the explosive growth of online learning (Allen & Seaman, 2017), centers find themselves as innovators for supporting faculty for teaching online (Herman, 2012). Drawing upon established frameworks for building and supporting faculty development centers (Gillespie & Robertson, 2010; Sorcinelli, 2002), this study seeks to explore how one CETL positioned itself to better support online faculty.

Online Learning

As has occurred across the nation, online learning at the institution has undergone significant changes in the last decade. Modeling trends reported by researchers over the last decade (Allen & Seaman, 2017), the institution has experienced remarkable growth in the number of students taking online courses. In 2010, the institution appointed a director of eLearning, a faculty member who split his time between the classroom teaching and logistical support of online learning. By 2011, the institution had a Dean of Academic Success and eLearning, which included eLearning, first year experience, advising, tutoring, testing, learning support. For perspective, in Fall 2010, the institution offered 31 fully online courses. By Fall 2013, 79 sections of fully online courses were offered. In Fall 2017, the college offered 170 fully online courses. In seven years, the college saw an increase of more than 500% in fully online offerings. This does not take into account the numbers of hybrid and “eClassroom” courses that were being offered. An increase in course offerings meant an increase in faculty teaching classes via a modality for which they may not have been experienced with.

Organizational History and Restructuring

The CETL grew out of multiple years of work and a few different names between 2005 and 2014. In the early years of the faculty development work was a program for new faculty, called Faculty Academy. A supplement to this was created around 2010, called Faculty Institute, which was to support mid- and late-career faculty; FI was led by a faculty member who received a single course release for her work. However, the focus was primarily on face-to-face teaching. Between 2014 and 2016, faculty development was handled through the Division of eLearning and became focused primarily on online learning.

In Fall 2016, an organizational restructuring led to the formation of an independent CETL. Part of the impetus for this decision rested with the seeming conflict that having this work run out of eLearning suggested to faculty that course and faculty professional development was somehow only applicable to online courses. During the restructuring, the director was cautious about positioning the CETL in the most efficient place with the organization. Because CETLs often occupy tenuous spaces, they should report as highly in the organizational chart as possible (Robertson, 2010). Being positioned directly beneath the CAO ensured that the CETL would have the necessary administrative support and institutional capital to be successful. By reporting directly to the VPAA, the CETL was
ensured a seat at many essential tables, which allowed it to build stakeholders, value different perspectives, and cultivate administrative commitment (Sorcinelli, 2002).

Beyond the organizational challenges, the CETL faced geographical challenges. The institution consists of six instructional sites spread across northwest Georgia. This means leveraging online learning for both students and for faculty/staff learning. Because of the distributed campus model, students in recent years have been driving demand for online schedules that complement their face-to-face schedules, which follows trends noted by other researchers (Allen & Seaman, 2017). Because of a significant online reach, the CETL made a strategic decision to focus the first couple of years on completing projects that had started in the Division of eLearning. This allowed the CETL “to be highly visible and accessible so that faculty [could] get to know the center” (Sorcinelli, 2002, p. 12).

As the institution reorganized, leadership wanted clear divisions of work. The CETL focused on all teaching and learning aspects, while the director of the new eLearning Support Services would be located within Information Technology Services (ITS) and function to meet technology needs for online courses, focusing mostly on technology account management at personal and enterprise levels. Inevitably, there are still areas where these responsibilities are not as clear as they could be. By focusing on continuous improvement to refine those responsibilities as various issues arise, the CETL has strong relationships with senior leadership in the offices of Academic Affairs, ITS, and Planning, Assessment, Accreditation and Research.

Faculty Input

Having faculty input in as many matters as possible is an essential approach. The CETL director conducted a needs assessment with the academic deans and key faculty stakeholders (Ali, et al., 2005). Before the first official event, CETL staff worked to solicit faculty input and cultivate strategic buy-in from key stakeholders. With the structural changes, the director anticipated there could be gaps in the ability to work across multiple divisions and instructional sites. The CETL worked to identify key players who could support the center’s mission and who would encourage innovative programming.

To build relationships, CETL staff focus on encouraging faculty to bring ideas, concerns, and problems directly to us. Keeping records of consultations and conversations around innovation allows the staff to look for patterns of requests and/or problems and to leverage faculty expertise.

Initiatives, Training, and Programming

Because the focus of the CETL is pedagogy, programming if framed around such efforts. As other researchers note, there are several primary types and foci of training for online instructors (Herman, 2012; Meyers & Murrell, 2014). The institution offers programming that aligns with national trends, including training for learning management systems, seminars, webinars, consultations, and peer-observations (Herman, 2012). One area where the CETL differs from many is that it does not provide introductory training for using the LMS. Instead, the focus is on the pedagogy of the LMS; CETL staff provide support for teaching with specific tools and using specific instructional approaches, but the ITS department and eLearning support services offer the initial user credentials and training.

One particular aspect of development that the CETL has allocated a great deal of energy to is Quality Matters. In the Fall 2014, four individuals had completed the APPQMR training. By the end of the 2017 academic year, over 140 faculty had completed the APPQMR training, with another 30 completing an online abbreviated short-course. One major change made to facilitate this scaling up was to have the instructional designer become a QM Certified Face-to-Face Facilitator. This allowed more in-house training, including building the tailored short-course, and reduced costs to QM. For example, in 2015-16, the institution spent approximately $16,000 on QM trainings. In 2016-17, the CETL reduced that amount to under $8,000. For 2017-18, the CETL is on pace to reduce that cost to under $4,000. All of the college’s full-time instructors who teach online (whether fully online courses, eClassroom, or hybrid courses) have gone through the APPQMR training, while all part-time instructors teaching online have gone through the short-course. Roughly 20 other faculty have completed additional trainings from QM, from Master Course Reviewer training to individual workshops on instructional alignment within QM Standards.

Another area requiring additional support was in Section 508 Accessibility support. As the online presence grew, so, too, did the need for more robust training for Section 508 compliance. In 2017, the CETL began offering
“Accessibility By Design” workshops. These were initially in face-to-face formats, as day-long workshops. In Spring 2018, the initial workshop (Introduction to Accessibility) was moved to a self-paced, online format to better meet the needs of the faculty. The advanced workshops, which deal with application specific training, are still currently offered face-to-face because of the hands-on nature of the activities and assessments. All full-time and part-time faculty have access to the online training and anyone wishing to complete the advanced training will have to complete the initial web-based course. Additionally, the move to an online format allowed the CETL to expand its reach to faculty, leveraging the limited human resources the center currently has.

A key achievement has been the successful adoption of a tool for observing and evaluating faculty. As many have noted, observations of instruction are essential to improving instruction and building instructor capacity (Martin & Double, 1998; Purcell, Scott, & Mixson-Brookshire, 2017; Swinglehurst, Russell, & Greenhalgh, 2008). The institutional tool is an adaptation of Pennsylvania State University’s Faculty Peer-Review of Online Teaching (Taylor, 2015). The CETL director was chosen to guide the development and adoption of a tool because of his experience as an online instructor and his background in teaching and learning. In Fall 2015, three faculty needed to have formal observations of their online courses completed for post-tenure review. Prior to this, there was no standard tool or protocol for observing online teaching. Beyond having a tool for summative evaluations of teaching for administrative purposes, leadership wanted a tool that initiated a conversation about teaching and learning and which led to observable changes in teaching activities and behaviors. After months of working with faculty to pilot and refine the tool, in early 2018, the Faculty Senate adopted the instrument and a protocol for using it at the institution. Having a single, consistent tool and protocol is essential to supporting faculty teaching online.

Another initiative which grew out of faculty input was the desire for faculty learning communities (FLCs). Using models from Milton Cox (2004), the CETL gave faculty the opportunity to lead semester-long FLCs focused specific problems and/or texts. Of the first three FLCs, one was specifically focused on online learning (Michelle Miller’s Minds Online) and delivered as an online FLC, while another was delivered as an online FLC (Carol Dweck’s Mindset). Faculty reported that being put into the role of a student in those courses are helpful. The CETL has scheduled more FLCs to support communities across the college and disciplines.

Data-Driven Planning and Assessment

One aspect missing from previous faculty development initiatives and planning was an emphasis on data. This became evident as the director compiled data for the institution’s SACS-COC reaffirmation in 2017. Faculty development had previously been evaluated and assessed based solely on participation and satisfaction measures. Improving assessment of programming was critical to ensure faculty are supported.

The CETL began its focus on data and assessment by creating outcomes for New Faculty Academy. Rather than only have guest speakers or workshops that were assessed by participation and satisfaction, the CETL worked across departments to create specific program outcomes and worked to assess those through various measures, including summative and formative assessments. CETL staff continually evaluate programming to improve the quality of offerings.

Likewise, the CETL applied this approach to QM efforts. By having the instructional designer run face-to-face QM sessions, the CETL was able to do more robust assessments of the training and ensure that faculty were meeting the outcomes of the training. In addition to APPQMR training, the instructional designer created a “Digging Deeper” series focused on QM standards. Internally, the CETL could now train, assess, and recognize faculty for their expertise in QM standards.

Another way that the CETL has used data is to focus efforts at development across the six instructional sites. Because of geographic spread and the limited staff in the CETL, the director has examined trends and patterns of faculty who participated in development workshops. By reviewing those trends, the CETL can offer targeted support to faculty who may not have had access to the same types or levels of training. For example, the CETL director noticed that science faculty were largely absent from active learning workshops. Several science faculty at one site participated in course design workshops, but few attended active learning workshops. As a result of this trend, the CETL is working to offer science-specific mini-workshops to be delivered at monthly science meetings.
Additionally, the CETL began to track online faculty loads, to determine who might be in need of additional help or who might be able to facilitate some training. Noticing that several newly hired faculty (less than three years of service) are now teaching more than half-time loads of fully online courses, CETL staff have been reaching out to these individuals to offer additional support for building, delivering, and assessing their courses, outside of the usual basic support generally offered.

Data-driven planning and assessment will continue to be a focus for the CETL as the institution enacts its QEP, which focuses on advising. Because of the growing online populations, the CETL has incorporated training for online advisors into the QEP, which allowed the college to take a sustained look at various data sources to plan professional development activities over a longer range than usual.

Conclusion

Supporting online faculty is a challenge. To ensure that online faculty are aiding students in meeting learning outcomes, this institution had to reconceptualize the faculty development efforts. Fully online course offerings have increased more than 500% in the past eight years. The number of online instructors has increased from 18 in Fall 2010 to 84 in Spring 2018. The need for increased and improved faculty development opportunities was an institutional imperative. Moving faculty development out from under an established eLearning office was a potentially risky move. However, doing so allowed the institution to leverage its resources and provide more support for all faculty.

References


Herman, J. H. (2012). Faculty development programs: The frequency and variety of professional development programs available to online instructors. *Journal of Asynchronous Learning Networks, 16*(5), 87-106.


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Behind the Curtain:
Course Design for Improved Experience and Capacity

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Caplan (2004) recognizes online course design as “a complex endeavor” which necessitates “a highly organized, concerted effort” (p. 186). Unfortunately, by 2015, the ‘concerted effort’ which had served Central Michigan University well for several years was breaking down. A trifecta of themes including increasing demands, mismatched duties and skills, and evolving faculty needs were collectively contributing to declining effectiveness. The instructional design team, consisting of three full-time designers, one clerical professional, and three part-time student employees, was struggling to produce thirty-five new courses per year, while revising as many more. From the outside, everything appeared to be working well enough but faculty were becoming frustrated with the isolating experience of working one on one with an instructional designer, being limited by templates and old paradigms. Designers were struggling with workload – serving simultaneously as contracting agents, project managers, designers, and liaisons to many other stakeholder groups. Data analysis revealed that project deadlines were being missed a staggering 89% of the time. On average, course design required 145 days end to end.

Smith and Ragan (1993) defined instructional design as “the systematic process of translating principles of learning and instruction into plans for instructional materials and activities” (p. 2). Despite this common representation, much more is routinely expected of Instructional Designers. Research assigns pivotal importance to instructional design personnel and indicates an impetus to act upon the fabric of higher education, to bring about cultural and organizational shifts, while simultaneously preserving the integrity and quality of instruction, managing teams and projects (Campbell, Schwier, & Kenny, 2009; Ross & Morrison, 2012; Williams van Rooij, 2010). This is a tall order, especially considering possible disconnects between preparedness and expectations; Williams van Rooij (2010) found just 23% of instructional design graduate programs included project management in their curriculum.

With all of this in mind, and an impetus from the University’s Board of Trustees, a committee was formed – the Online Academic Programs Committee (OAPC), to substantively investigate all aspects of online program creation, development and delivery. A year later, among other conclusions, OAPC established four sub-committees. One of which, the Education and Preparation committee, was tasked with “develop[ing] an innovative, ongoing and sustainable education and preparation plan that prepares faculty to employ best practices for e-learning” (OAPC, 2016). The Education and Preparation sub-committee was co-chaired by Jeremy Bond, interim director of eLearning and Kathryn Dirkin, professor and chair, teacher education and professional development. Membership included faculty from multiple colleges, library personnel, and other administrators engaged in faculty support and development.

The committee’s research efforts included interactions with online learning design and faculty support staff from several other institutions including Michigan State University, Virginia Tech, the University of Arizona, and SUNY Polytechnic Institute. In essentially all cases, online course design was occurring by virtue of what Hixon (2008) refers to as “team-based course development” (p. 2), an approach which is common at schools focused exclusively on online education (Hixon, 2008). At more traditional institutions, however, faculty typically have “freedom and responsibility to design and develop courses autonomously” (Hixon, 2008, p. 2). The situation at Central Michigan University was somewhere in between these two states.
As noted earlier, faculty worked one on one with an instructional designer when designing online courses. The outcome was often a sense of isolation for the faculty, while the designer was simultaneously challenged by an extraneous task set, little of which had direct relevance to instructional design.

To bring about a more collaborative and effective approach, the responsibilities of individuals working within the Center for Excellence in Teaching and Learning (CETL) were reviewed and realigned (Patton & Pehrsson, 2016). In addition, “a support structure [was created] for lower-level tasks in order to give instructional designers and media production specialists time to work with additional faculty” (Patton & Pehrsson, 2016, p. 11). Contracting was moved to faculty assignment, under the purview of Jennifer Jones, coordinator of faculty assignment. Issuing even 100 additional contracts for online course developments represented less than a 4% increase in volume for her team. Kendra Brown, coordinator of faculty support, lent expertise to the design of the collaborative course design process, establishing a schedule of events, agendas, communications, inclusion of area representatives, and coordinated arrangements. These two crucial areas of change in effect severed the common pairing of instructional design with project management, which has proven pivotal to our success.

A pilot of three “course design cohorts” consisting of about five faculty each were assembled in fall of 2016. While only one of the three cohorts worked to design new courses, while the other two revised existing content, results were nonetheless immediate and compelling. One of the cohorts, a group of faculty revising cyber-security courses, worked entirely remote, scattered across the country, from Washington D.C., to California. Some of what was achieved was hoped for, even anticipated, but much else also surfaced came as pleasant surprises. Whereas previous interaction between developer and instructional designer required face-to-face interaction, this process, and enhanced technology, allows for seamless interaction between the developer and ID as well as other cohort members and staff. Like online course design itself, time and place for development interaction is no longer mandatory. The average time to completion of course design, through a total of five complete cycles, has declined to approximately 93 days. A design team of essentially the same historic size now works to support the design of up to 45 courses in three 12-week cycles each calendar year. Representatives from various stakeholder areas, in and outside of CETL, play a more active role in availing faculty of their services directly. Faculty to faculty cooperation, interaction, and even scrutiny occurs organically and in context. In particular, this latter outcome has proven valuable synergistic. In addition to introducing a motivating level of peer pressure, faculty-to-faculty interaction relieves, to some extent, the need for the instructional designer to serve as task master and instead allows for a more “collaborative relationship between the instructor and instructional designer…” [and] “just-in-time instructional development” (White, 2000, p. 59). To further support faculty and revised timelines, a new service was also established. Titled CoursePro, the service provides a mechanism for faculty to offload tedious or repetitive tasks within the LMS to a ticketing queue overseen by a full-time staff member. The full-time staffer, literally the “CoursePro,” Coordinator/Online Course Production, then has access to assign work to a pool of graduate and undergraduate student employees.

Since the pilot, an additional 130 courses have been revised (14) or newly developed (116). To evaluate faculty experience along the way, participants in each cohort group were surveyed following the conclusion of the process. Feedback has been very positive thus far, surfacing three key themes.

Multiple respondents noted the value of viewing peers’ courses and having access to other perspectives and ideas from their colleagues. Comments included, “I thought viewing each other’s [sic] courses was the most helpful because it gave me ideas and we could discuss different approaches and how one way of doing something might work for my course but would not work for someone else”, “I am a visual person and benefit from seeing others’ shell and allowing others to view mine and share their feedback”, and “[b]enefiting from the collective experiences, ideas, and expertise of the other developers, the instructional designer, and all of the other support staff that were available and eager to help.” This latter comment indicates another common element present, specifically the utility in having access to a variety of staff supports, including instructional designers, media producers, librarians, and, especially, CoursePro.

Additional remarks support this claim:

“The staff also seemed to have different ideas and suggestions that were helpful throughout the process”, “…not only did the CoursePro folks handle technical content in Blackboard, but also suggested ways to make course elements work better, they did copious amounts of proofreading in every project (which felt like the tech support [sic] equivalent of getting chocolates on my pillow at a hotel”, and “[p]ersonal interaction with a designer made me think of doing things I normally wouldn't do.”
Finally, though also of value, were the cohort gatherings themselves, as some noted, “the cohort meetings allowed [my peers and the staff] to give us only the information that our cohort specifically needed”, “[w]orking with the other people. Which is surprising, because by and large I think that other people are to be avoided. Seriously: I'm an ISTJ, so I often don't "work well" with others. This was a marked divergence from my previous experience, and was incredibly welcome” and meeting “with others to make sure our courses complemented one another (those in the same program) and also generating unique ideas.”

The overall cohesion of each cohort has proven to vary widely. The variability seems to relate to several factors including prior faculty experience, perception of their own expertise and that of others, strength of curricular ties and commonalities among the courses, and the style of the instructional designer and other staff (e.g., librarian). For this reason, additional research at an individual cohort level is likely needed. Meanwhile, the cohort approach to online course design remains in use at Central Michigan University as of the summer of 2018.

References


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The Online Student Support Scorecard was developed through the collaborative efforts of the public colleges and universities in Florida. The first edition was created based upon the work of the Florida Virtual Campus Members Council for Distance Learning and Student Support (MCDLSS), Access Workgroup. This workgroup consisted of distance learning leaders from the colleges and universities across Florida. Through that workgroup the first edition of the scorecard was a tool that would allow the higher education institution to evaluate whether or not their online student services offered met the expectation outlined by the Southern Association of Colleges and Schools Commissioned on Colleges, Distance and Correspondence Education Policy Statement (2014).

At the same time the Florida Board of Governors State University System (SUS) was developing the 2025 Strategic Plan for Online Education for the Florida University System. Within the quality section of that document is a tactic to “Ensure that universities use Quality Scorecard or a similar process to confirm that online students, including online students with disabilities, have access to services equivalent to those used by campus-based students (Board of Governors, 2025, pp. 10).” The tactic was included in the Strategic Plan because of the concern of uneven service offerings for the online students across the state. The workgroup became a combination of distance learning administrators and student support administrators across the colleges and universities in Florida. Many of the workgroups contained representation from both the college and university systems, as a way to ensure that the finished products can be used across both systems and ultimately facilitate a students’ smooth transition from one system to another. Because Florida views itself as an integrated system, it is possible for students to take classes online at any institution across Florida and those courses apply to the degree at the students’ home campuses. Eventually, the two workgroups, the MCDLSS and SUS, combined their separate scorecard work to produce the current version of the Online Student Support Scorecard.

The goal of the second version of the scorecard was to evaluate the availability of online student support services at all of the public post-secondary institutions in Florida. The experts on the workgroup wanted the results to be used to start honest discussions across the campus to promote the ideas around providing support for online students, rather than be seen as a punitive measure. For this reason, the scorecard does not have an extensive rating scale. The scorecard is set up in a simple three level format. The first, or zero level of the scorecard requires the online students to come to the campus for the service. The score of one indicates the service is available beyond campus using email or telephone. The score of two is exemplary level of service which extended beyond the typical work day and into weekends. Using this scoring method, an institution could use the scorecard for continuous improvement of the online support services.

The Online Student Support Scorecard was not designed to evaluate every potential service available. Institutions offer a variety of different services for students and the services offered have evolved for different reasons and processes. The decision of the workgroup members was to take a broad view of the services focusing on the student life cycle, promoting a college experience, increasing access to essential services, and to increase engagement with the institution. This approach resulted in a balance between a listing of services and ease of use with 11 major categories with 51 different quality indicators.

A list of the categories follows:

- Admissions (5)
- Financial Aid (2)
- Pre-Enrollment Advising (5)
- Veteran Services (2)
The scorecard was designed to be a tool for continuous improvement. The institution implementing the scorecard can be introspective in the evaluation by asking the question as to whether the services provide support the online students and are those services equivalent to those offered by the on-campus students. From the introspective perspective, the scorecard becomes a conversation starter across campus. Through the implementation the institution can identify opportunities for improvement. Finally, this helps the institution accomplish the original purpose of the scorecard, which is to demonstrate that the institution is doing its due diligence in providing equivalent services for the online students in the accreditation process.

A Case Study of the Implementation

Over the past few years, the distance learning administrators at one of the Florida Universities had spent time talking with the different student support services across campus. The first response was ‘we have online students?’ Slowly, the different units across campus began to expand the services they were offering in online formats. The academic affairs leadership teams had already begun to expand the availability of services beyond the typical work hours and some weekends as a student success initiative. Many the students at this university were commuter students requiring the extended services. The commuter students needed the same types of support as the online only students.

Once the online scorecard was developed, a copy was shared with different units across the campus. A presentation about the scorecard was made to the Student Affairs Leadership Team. The vice-president was very supportive and the team began to reflect and put in place online student support services for each of the offices in the division.

The next step was to use the scorecard to evaluate the services. The evaluation was conducted with the distance learning administrator visiting with the leaders of the different areas identified on the scorecard. Using the criteria on the scorecard during a discussion about the online services provided by the unit, a score was determined. This ensured that a unit could demonstrate the level of service scored. The conversation also communicated the expectations about the level of service the administrator to achieve.

After the scorecard evaluation, the administrator or their representatives from the different units providing support services were invited to a meeting. At that meeting, the representatives recommended that the Center for eLearning create a liaison model for the student services. The liaisons “would support a culture of change from online students as a separate category to all online students are FAU students” (Center for eLearning Advisory Board, 2017, pp. 25). The liaison would be responsible for three activities within their respective units: (a) building awareness of online student needs, (b) coordinate training, (c) and ensure equivalent access to services (Center for eLearning Advisory Board, 2017).

The process is working. This spring, the Center offered the first training session in which over 100 student service support individuals are attending the training. The departments that scored low are putting in place services to support the online students. The units are also reaching out to the Center requesting support in distributing their messages and their services for online students.

Future Efforts

The next step is to evaluate the students’ perspective of the online students offered. The survey will be based upon the original scorecard to allow the comparisons with the institutions score. If the institution believes the services are available but the students do not, the institution needs analyze that gap and potentially evaluate the communication plan with the students or identify the accessibility of the service from the institution’s website.

The research team is planning to publish a future article on the statewide results of the scorecard. The team is waiting for the results to be shared with the academic leaders in Florida before the publishing of those results.
The Online Learning Consortium (OLC) is currently negotiating for rights to release the scorecard as an OLC tool. If an agreement is reached, a copy of the scorecard will be available for free by the organization. As a member of the Consortium, an interactive version will also be available. The interactive version will include suggestions for improvement with examples by other institutions for the implementation of that service for online students. Consultants and a guidebook will also be available.

References


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The Cost of Online Education: Leveraging Data to Identify Efficiencies

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Abstract

In the fall of 2017, the University System of Georgia (USG) embarked upon a robust study to determine the cost of delivering online education at each USG institution. An in depth analysis related to the cost of online course and faculty development; technology and infrastructure; support services and; administrative services was conducted on each campus. At Kennesaw State University, the cost study helped to inform a revised budgeting process and identify areas that were being subsidized by eTuition. The results were used to identify efficiencies and address college affordability concerns.

Introduction

The ability to deliver affordable online education affects the educational attainment of students across the nation, especially the 34% of online learners who are first generation college students (http://pnpi.org/first-generation-students/). Nationally, online and face-to-face tuition are equal at 75% of higher education institutions. However, when course fees are added to the equation, online students end up paying more than campus students more than half of the time (Poulin & Straut, 2017). In the state of Georgia, 15% of all undergraduate college courses were delivered online in FY 16 (Griffin & McGuire, 2017). In utilizing a separate eTuition rate for online courses, a cost disparity began to emerge. Out of state students were paying the same amount for online courses as in-state students and, in some instances, in-state students were paying more when they combined face-to-face and online courses in their schedules, since face-to-face courses come with significantly higher fees. Essentially, eTuition penalizes in-state students and rewards out of state students with a lower cost than out of state tuition (Griffin & McGuire, 2017). In spite of this disparity, college administrators are nearly unanimous in their agreement that it costs substantially more to deliver online courses than it does to deliver campus based face-to-face courses (Legon & Garrett, 2017).

While public funding and state appropriations for higher education have decreased, colleges and universities have come to rely heavily on eTuition as an additional, consistent revenue stream. In 2017, the University System of Georgia (USG) initiated a system-wide study to determine the cost of online education as part of a larger conversation around affordability in higher education. Since 1999, Board policy allowed institutions to charge special tuition rates for online courses and programs. This resulted in tuition variation for online courses across the system. In many instances, the price point of online courses resulted in a cost increase for in-state students. The Chancellor convened a committee to review the online tuition rate structure with the goal of making a recommendation to leadership regarding a new online tuition structure.

The study included four broad areas of cost analysis:

- Course and Faculty Development
- Technology and Infrastructure
- Support Services
- Administrative Services
Methodology

At Kennesaw State University (KSU), we quickly learned that no single entity collected the required data at the necessary level of specificity. Resultantly, the Director and the Business Manager of the Office of Technology Enhanced Learning (TEL) held multiple meetings with 27 different units across campus to obtain the needed data. Most meetings occurred in person, while some data were provided via email for smaller units with fewer costs associated with online learning.

A deliberate and methodical data collection process ensued which yielded consistency in the type of data collected and how it was represented. It also allowed for open dialogue with the units supporting distance learning. All data provided were entered individually into the appropriate categories in the excel file (course and faculty development; technology and infrastructure; support services and; administrative services). Once all data were obtained and entered, the Director and the Business Manager of TEL re-reviewed each entry to determine the appropriateness of including the cost in the study. From the first iteration to the final draft, many items were eliminated as extraneous to the cost study. Critical to the accuracy of the study was to maintain a focus on true costs related to distance learning, not merely expenditures.

Implications for Higher Education

By examining the cost of online education, through a large-scale data driven study, we were able to determine if we were truly meeting the needs of students, using our resources judiciously, and serving those who wished to pursue online education in the most accessible way.

The result was an average cost of $43 per credit hour cost to deliver online education and a system-wide awareness that not all institutions are able to offer the same level of support. A shared-services solution began to take shape and continues to be developed statewide. The study yielded many positive and some unintended outcomes. Many lessons were learned through the cost study, data collection, and analysis. We will discuss these and other highly politicized conversations around "affordability“ in the presentation.

At the conclusion of the study, it was clear that leaders in higher education must be able to understand, articulate, and communicate, the cost of online education, as well as the methodology for collecting cost data. Second, as part of a larger approach, higher education leaders must explore efficiencies that may exist on their own campus as a result of a cost study. These efficiencies, once identified, can be managed across a campus, or across an entire university system, thus reducing costs for students. Finally, it is important to analyze the implications, both intended and unintended, of a cost study on the university and on student affordability.

The subsequent 50% reduction of eTuition over year one, and a full elimination of eTuition in year two, will have significant implications for the 26 institutions across the USG. The reduction, and ultimate elimination of eTuition, will inevitably change online education on these campuses, as well as affect other services that were provided to students though eTuition revenue. For example, at Kennesaw State University, the cost study revealed that the Office of Distance Learning was paying for, and thus subsidizing, significant student services for all students at KSU, not just online students. In the absence of eTuition, we will have to find creative way to continue to ensure online course and program quality in the likelihood that we will no longer be able to support monetarily faculty stipends for those whose online courses become Quality Matters (QM) certified.

Several efficiencies and cost reducing measures existed on our campus that were illuminated through the cost study. Table 1 contains a list of shared services that KSU is already providing to the USG and Table 2 indicates services that KSU could share with other USG institutions in the future. The majority of the shared services identified center around professional development, web accessibility, and the utilization of space for online recordings and/or meetings.
Table 1.
**Shared Services Kennesaw State University Currently Offers to the USG**

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Matters “Independently Applying the QM Rubric (APPQMR) Workshop”</td>
<td>Twice per year since 2014, the Center for Excellence in Teaching and Learning provides the Quality Matters “Independently Applying the QM Rubric (APPQMR) Workshop” to faculty and staff from other USG institutions.</td>
</tr>
<tr>
<td>Closed Captioning Editing System Using Kaltura MediaSpace</td>
<td>The KSU Distance Learning Center and Learning Technologies, Training and Audiovisual Outreach Department worked with vendors Kaltura and Ceilo24 to create a custom editor that allows faculty, instructional designers, and vendor representatives to edit caption files inside of KSU’s MediaSpace. This new editing system is now available to all USG schools using Kaltura MediaSpace.</td>
</tr>
</tbody>
</table>

Table 2.
**Shared Services Kennesaw State University Can Offer the USG Immediately**

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TADL</td>
<td>The Teaching Academy for Distance Learning (TADL) delivered in a MOOC format via Coursera. This workshop helps faculty develop the competencies necessary for designing, developing, and delivering an online course.</td>
</tr>
<tr>
<td>OCFP</td>
<td>The Online Course Facilitation Program (OCFP) delivered in a MOOC format via Coursera. This workshop provides faculty with the necessary competencies to facilitate an online course by balancing both technical and pedagogical aspects.</td>
</tr>
<tr>
<td>Recording Studio</td>
<td>The DLC Production Studio features HD video production with three available backgrounds, including chroma-key. Can assist with online course video production and promotional video production.</td>
</tr>
<tr>
<td>Media Recording Booth</td>
<td>Experience the quality of a professional recording studio combined with a comfortable atmosphere for recording your content. With the post-production assistance of a Digital Media Specialist, you can produce cutting-edge, web-based content that engages and inspires your students. The MRB is the best choice for recording your DocSoft Speaker Profile.</td>
</tr>
<tr>
<td>Innovation Lab</td>
<td>The DLC houses a multimedia lecture-capture classroom and training facility containing 18 student spaces (one wheelchair accessible), a state-of-the-art instructor station, and three large wall monitors surrounding the room. A first floor location and step-less entry provides a comfortable setting. Participants must bring their own laptops.</td>
</tr>
<tr>
<td>CETL EOF</td>
<td>This workshop explores the various components of effective facilitation. Topics include providing effective feedback, creating a sense of community, strategizing time management practices, and ensuring instructor presence in an online course. This workshop would be appropriate for anyone getting ready to facilitate an online course or in the beginning stages of doing so.</td>
</tr>
<tr>
<td>CETL OCD</td>
<td>The Center for Excellence in Teaching and Learning’s (CETL) Online Course Development workshop is one possible pathway for faculty to earn online teaching certification. The purpose of the OCD workshop is to explore the basics of online pedagogy, effective practices for online course design and delivery, and introduce the Quality Matters (QM) Rubric for Online and Hybrid Courses, which provides a framework for designing, improving, and delivering online courses.</td>
</tr>
<tr>
<td>Web Accessibility</td>
<td>The “Faculty Four of Accessible Development” workshop provides faculty with training in the four primary areas that they need to ensure that their courses are accessible and meet Federal Guidelines.</td>
</tr>
<tr>
<td>Research Based Instructional Videos</td>
<td>Video and links to best practices in online teaching pedagogy.</td>
</tr>
</tbody>
</table>
Conclusion

College tuition costs continue to rise and the average in-state tuition and fees are almost $10,000 at public universities (The Chronicle of Higher Education, 2017). College affordability is a conversation that is now wrapped within political conversations, the national economic landscape, as well as among employers looking for a skilled workforce. A majority of public universities identify themselves as “extremely tuition dependent” (The Chronicle of Higher Education, 2017, p. 8) especially in a culture of decreased state formula funding. While college affordability is a worthwhile goal, there are often unintended consequences borne out of the desire to reduce student costs. One issue that remains at the forefront of the affordability conversation is can we sustain high quality online courses and programs and achieve student affordability at the same time?

While the USG eTuition Cost Study was labor intensive, it provided great insight into how our resources generated from eTuition were being used. At Kennesaw State University, we identified several areas where eTuition was, in fact, supporting campus based students by covering costs, especially of software and technologies, used by all students. The ultimate outcome of the cost study for KSU was providing a methodical better understanding of how to determine the cost of online education on our campus, and how the messaging around cost and affordability can affect the delivery of high quality online courses and programs.

References


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eLearning Master You Will Become

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Abstract
Wake Technical Community College launched their EPIC Master Online Teaching Certificate in fall 2016. This advanced certification is part of the college’s Quality Enhancement Plan (QEP) initiative. The QEP is based on best practices in eLearning called EPIC (eLearning Preparedness Initiative across the College). EPIC’s goal is to remove learning barriers and better support online student learning, persistence, and success. A team of faculty and staff developed the EPIC Master Online Teaching Certification to provide advanced training for experienced online faculty members.

Overview
Faculty members are the foundation and basis of an educational system (Beavers, 2009). Therefore, it is vital to provide adequate and proper professional development based on the needs of these faculty and to support them in their professional educational career. Also, through professional development, the faculty are provided with the knowledge required to tackle challenges in the classroom and meet the needs of the student to ensure success and retention. Avalos (2011) describes professional development for faculty as faculty learning and transforming this newly acquired knowledge into practice that will be beneficial for their students’ success.

Professional development opportunities are the pillars of learning, growth, and improvement in the world of faculty. Faculty are adult learners who tend to be lifelong learners as well. Some of the attributes of lifelong learners are being able to self-assess and identify areas of need for growth (Lewis, 1998). Lifelong learning has been broadly defined as learning that is available at different times and places, is flexible, and diverse and crosses many different disciplines, promotes learning beyond traditional schooling, and is continued through adulthood (Delors, 1996). The European Commission (2001) found that lifelong learning had four broad objectives: personal fulfillment, active citizenship, social inclusion, and employability/adaptability. These objectives of being a lifelong learner closely align with reasons why faculty take advantage of professional development opportunities.

By completing professional development training, the faculty will be able to use the newly acquired knowledge in the classroom to enhance their teaching practices and provide better learning opportunities for their students. This is what Schon (1987) refers to as “knowing-in-practice.” Through the EPIC Master Online Teaching Certificate Program, Wake Technical Community College has created an environment where the faculty go through action learning, have active involvement in their learning process and also, have the opportunity to critically reflect on their practice. King (2004) states that creating an environment where self-expression, freedom to explore new ideas, opportunity to question prior understanding and beliefs, and providing support to challenge themselves to become better educators is key to success.

The following section will outline the history and the key components of EPIC Master Online Teaching Certificate Program.
Online Instructor Certification—A Faculty Preparedness Strategy

The EPIC Online Teaching Certification programs provide faculty with the additional training they want and need in pedagogy and technology. EPIC eLearning Quality Standards (2015) and an associated rubric (2015) for evaluating online courses were developed based on research into best practices, including Quality Matters (2015). These tools provide the framework for the certification program.

The training and certification process was implemented beginning in fall 2015, with all online faculty scheduled to earn their online teaching certification before fall 2017.

The following describes EPIC’s three online teaching certification pathways:

Pathway 1—Online Teaching Certification through Professional Development

Certification through Professional Development is one of three ways for instructors to be certified in online teaching. This pathway includes 30 hours of professional development training (referred to as “EPIC30”), which concentrates on online teaching pedagogy and universal design for learning (UDL) principles. Pathway 1 certification is received when a faculty member has obtained training in online teaching aligned with EPIC Quality eLearning Standards. Courses cover best practices in course navigation and design, online communication and collaboration, online assessments, UDL, accessibility, LMS skills training, and culminates with a capstone course that requires mastery-level demonstration of design and delivery skills described in our EPIC Quality eLearning Standards.

Pathway 2—Certification by Review

Peer Review is an available option for experienced online faculty who have completed extensive training in LMS technology and online pedagogy. If experienced online faculty are employing best practices, it will be observable in their existing courses. With supervisor approval, faculty may opt to put a course up for review. Faculty will be certified by a team of three certified Peer Reviewers reviewing each course using the EPIC Quality eLearning Rubric. Certification is awarded when the majority of the peer review team agree that the course reviewed demonstrates that the faculty member is already practicing online teaching aligned with EPIC Quality eLearning Standards.

Pathway 3—Lateral Entry/Short Notice Hires

In the event instructors are needed to teach online courses on short notice (as determined by supervisors), they will agree to work with a qualified mentor while concurrently completing the Online Teaching Certification during a period of no more than three 16-week semesters. A mentor will be responsible for ensuring adherence to guidelines and standards. The new online faculty member will agree to work with an EPIC Master Certified Mentor within his or her department/program (or the most relevant discipline area if there are no Mentors within his/her discipline) while concurrently completing Pathway 1 certification courses.

EPIC Master Online Teaching Certification

Once a faculty member has completed their EPIC Online Teaching Certification, they can work towards eligibility for the advanced certification. The Master Online Teaching Certification is a faculty-development program designed to increase an experienced faculty member’s mastery of online teaching and pedagogy.

In order to earn the EPIC Master Online Teaching Certification, a faculty member must successfully complete:

- Advanced courses in accessibility (Accessible Documents, Accessible PowerPoint, and Accessible Video)
- One of the following elective courses:
  - EPIC 105 Peer Review—Training on online course evaluation using the EPIC Quality eLearning Standards and associated rubric.
EPIC 106 Mentoring—Training for new mentors on best practices, polices, goal setting, time management, relationship building, communication, and conflict resolution.

EPIC 107 Advanced Accessibility—Courses teaching advanced techniques in developing and delivering accessible content including audio, video, Word, PowerPoint, Excel, and Adobe Acrobat.

EPIC 108 Advanced Online Teaching—Course teaching advanced concepts in pedagogy/andragogy, UDL (Universal Design for Learning), instructional design, technology tools, and fostering student engagement and success in online courses.

EPIC 110 Exemplary Course Capstone

Capstone

For EPIC Exemplary Course Capstone (EPIC 110), faculty are paired with an Instructional Designer and together they create a dialogue, exchange ideas, build a learning environment that will best serve our students, and hence, elevate the level of education at our institution.

The Instructional Designer will act as a consultant and mentor over a semester in updating an existing online course. The course used must have been developed by the faculty member and upon completion of EPIC 110, the course will be designated as an exemplary course. Support includes a Subject Matter Expert (SME), accessibility specialist, assessment specialist, and video transcription assistance. The end product will be a course that has pedagogically sound design and contains engaging content, learning activities, and assessments.

Faculty agree to share with their Instructional Designer both retention data and student comments related to the course from Instructor Course Evaluations. Each course will have its final evaluation, using the EPIC Rubric, completed by an Instructional Designer or Peer Reviewer. After the final evaluation, the faculty member agrees to have their course posted with other “exemplary” courses for other college faculty to review. Faculty are recognized with a framed certificate plus an EPIC Master badge to use in their courses and within their email signature.

Summary

Wake Technical Community College’s EPIC Initiative interventions/strategies relate directly to students’ online learning skills and their online learning needs. The EPIC Master Online Teaching Certification provides additional professional development training and one-on-one coaching from an Instructional Designer to raise the quality of both design and delivery in online courses.

References


Koehnke, P. (2013). *The Impact of an Online Orientation to Improve Community College Student Retention in*


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Incorporating Powerful Integrations: Meeting Quality Design Standards in Today’s Learning Management Systems

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Incorporating powerful integrations that meet Quality Matters, Blackboard Exemplary Course Program, and Online Learning Consortium design standards to promote collaboration, manage curriculum, and support student learning is vitally important to faculty and instructional designers in higher education. Integrations are add-ons for Learning Management Systems (LMS) which assist users with the tools to create, manage and deliver educational or training content.

Integrations aid in meeting quality standards for an exceptional student experience. The benefits of LMS integrations are many and varied. Benefits such as working with products and integrations that are already familiar to the user can increase the rate and ease of adoption. Integrations can also deliver a much better user experience.

Today’s hybrid and online course designs must meet high standards to achieve positive student outcomes. Faculty members and instructional designers are tasked to achieve this. In order achieve this, some professionals use quality design standards such as the OLC Quality Scorecard. Quality design standards and rubrics provide institutions with the necessary standards and tools to ensure online learning is provided at a level of quality instruction.

A number of powerful integrations are used in Learning Management Systems, such as, Cengage, Qwickly, Soft Chalk, Articulate Storyline, and Hoonuit (formerly Atomic Learning). These tools are used to aid in the design of courses and help to ensure that the courses meet the standards. By ensuring courses, meet high quality standards, students are more likely to succeed in navigating the course.

Using powerful integrations allows for consistency of navigation across courses. The number one priority is the students and their success. Students, as well as accrediting bodies, love consistency. Meeting quality design standards, it helps to increase retention. When students understand where course content is located, they are more likely to complete the courses. Integrations allow for the ease of development and management for course developers, instructional designers, and faculty. Using the integrations provides groundwork for earning quality certifications (e.g., Blackboard Exemplary Course Program, Quality Matters, and OLC Scorecard).

Many LMS integrations prepare students for learning on the first day of class. For example, in just a few clicks, both instructors and students are able to access various resources using the campus’ LMS login credentials.

In conclusion, it is vitally important that faculty and instructional designers in higher education incorporate powerful integrations that aid in meeting design standards, such as, QM and OLC, promote collaboration, manage curriculum, and support student learning.

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Navigating the Shifting Landscape of Distance Education

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Michele H. Riley
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Abstract

This paper examines changes in distance education which have resulted in university acquisitions, mergers, and a noticeable shift away from the for-profit model. An insider’s perspective of Purdue’s acquisition of Kaplan University will be explored.

The Shifting Landscape of Higher Education

Higher Education in the United States has witnessed dramatic changes in both online and traditional education. For-profit schools that have been primarily online suffered substantial declines in student enrollment and increased government scrutiny during the Obama administration. Surviving schools have taken advantage of less hostile political environment to engage in a substantive number of changes including an exodus from the for-profit model to nonprofit and highly visible mergers and acquisitions. State university systems have also seen numerous mergers of institutions in an attempt to control costs and meet the changing needs of American higher education.

Mergers and Acquisitions

University systems of Georgia, Louisiana, Connecticut, Wisconsin, and Pennsylvania have all conducted or proposed massive mergers of institutions. Just recently, the Chronicle of Higher Education reported on the falling enrollment in Maine and the state’s efforts to combat the drop by creating an initiative called One University (Gardner, 2018). In Georgia alone, the following schools were merged: Abraham Baldwin Agricultural College and Bainbridge State College, Georgia Southern University and Armstrong State University, Albany State University and Darton State College, Kennesaw State University and Southern Polytechnic State University, Gainesville State College and North Georgia State University, Middle Georgia College and Macon State University, Waycross College and South Georgia College, and Augusta State University and Georgia Health Sciences University. With the campus consolidations come all associated online programs.

The University System of Georgia (2018) offers six guiding principles for consolidation:

1. Increase opportunities to raise education attainment levels
2. Improve accessibility, regional identity, and compatibility
3. Avoid duplication of academic programs while optimizing access to instruction
4. Create significant potential for economies of scale and scope
5. Enhance regional economic development
6. Streamline administrative services while maintaining or improving service level and quality

These goals are likely to be echoed by other university systems in an attempt to endure the current political and economic environment. Azziz, Hentschke, Jacobs, and Ladd (2017) note that a series of pressures have caused the massive amount of mergers and acquisitions including the Great Recession of 2007 and a trending decline in high school graduates. Moody’s Investor Service predicts the closure rates for small colleges and universities will triple. Put simply, schools that are vulnerable to closure are being considered for mergers and acquisitions as an alternative.
The key risk factors identified by Azziz et al. include:

1. Enrollment under 1,000
2. Lack of a complete online program
3. Tuition increases greater than 8% per year
4. Tuition discounts greater than 35%
5. Tuition dependency greater than 85%

Table 1.

Number of M&A Transactions in U.S. Higher Education, 1900–201 (Azziz et al., 2017)

Table 1 represents the number of mergers and acquisitions from 1830 to 2017 and demonstrates the dramatic increase since 2010.

As evidenced by Table 1, the number of mergers and acquisitions are on the rise as the promise of greater efficiencies becoming even more attractive with persistent trends that pressures smaller institutions. The most successful mergers and acquisitions occur when there is a shared vision between the institutions, commitment from both institutions, competent leadership, and effective process management.

Schools that have been primarily for-profit and online have also been involved in several very public acquisitions and mergers. DeVry University and their Keller Graduate school with student enrollment of almost 30,000 was recently “handed over” to Cogswell College, a private for-profit school with 600 students. No funds were exchanged in the proposed acquisition. For-profit online giants Strayer University and Capella University announced plans to merge forming an organization with 80,000 students. Both schools plan to maintain operations as distinct universities.

For-Profit to Nonprofit

In addition to mergers and acquisitions, online schools that have been operated as for-profit entities have shifted towards nonprofit. The for-profit sector has endured blistering criticism and regulations during the Obama administration and increasing competition from strong nonprofit online universities with growing enrollments. The attractiveness of the nonprofit designation in terms of attracting students is undeniable especially given the
negativity surrounding the for-profit sector. Furthermore, as nonprofit, universities no longer face the federal requirement that at least 10 percent of revenue come from sources other than Title IV federal student aid. In response to one university’s request to change its status, Obama administration Education Secretary John King, Jr. was quoted as saying “This should send a clear message to anyone who thinks converting to nonprofit status is a way to avoid oversight while hanging onto the financial benefits: don’t waste your time” (Kreighbaum, 2016).

For many of these schools, the time is ripe to change designation and structure. Industry analyst Trace Urdan noted that many universities are moving quickly to merge, acquire, or change profit status because there is a window of opportunity to “get deals done that may not be available to them if a Democrat gets elected in 2020” (Fain, P. 2017). For example, The Dream Center, a nonprofit missionary organization is seeking to purchase Education Management Corporation with its Argosy University, South University, and Art Institutes with over 60,000 students in an attempt to restructure the organization as nonprofit for the amount of $60 million. One of the largest online universities, Grand Canyon University, submitted a second attempt to have their classification changed from for profit to nonprofit. Their first attempt was denied by their regional accreditor, the Higher Learning Commission (HLC). The university is hopeful that since restrictions have been lessened under the new administration the second attempt will prove successful. University President Brian Mueller cited the HLC’s consideration of the proposed Purdue University’s acquisition of for-profit Kaplan University as reason to hope the organization will change its stance (Smith, A. 2018). Thus, higher education is closely watching how the Purdue University acquisition of Kaplan University transpires.

**Kaplan University to Purdue University Global**

On April 27, Purdue University officially released the news that it would be buying for-profit Kaplan University (KU) for a $1. Immediately, faculty and staff from both institutions were informed of the purchase. Prior to the announcement, both parties had negotiated and completed non-disclosure agreements to comply with federal trade laws. The purchase agreement entailed that Kaplan University would remain a separate entity as a public benefit corporation with no state funding. Kaplan Higher Education (KHE) would provide support services to the new university. All the academic pieces of KU would become part of Purdue. Over the next year, many obstacles to overcome would be necessary for this deal to complete. First, the acquisition would need approval from the Indiana Commission for Higher Learning, U.S. Department of Education, and the HLC.

Both Purdue and KU administration worked to complete the necessary changes to complete the transition. On August 10th, the Indiana Commission for Higher Learning approved unanimously Purdue’s acquisition of KU. Teresa Lubbers, Indiana Commissioner for Higher Education, released the statement about the decision, “The action taken by our Commission today is the culmination of a thoughtful, deliberative process to meet the legislative charge, and it reflects our strong support for new, innovative approaches that ensure Indiana is well-positioned to meet the needs of more students” (Holden, 2017). On September 19, 2007, Purdue University received word from the U.S. Department of Education under the direction of Betsy DeVos, U.S. Secretary of Education, that the deal had been approved. Finally, the HLC staff and peer reviewers visited Purdue and Kaplan university faculty, students, and staff in October 2017. The HLC trustees met on February 22, 2018 to vote on the Purdue and Kaplan University merger. Meanwhile, the new university has received an official new name of Purdue University Global on January 11, 2018. The merger will not be complete until approval has been received by the HLC.

It must be mentioned that there has been resistance to the acquisition by Purdue University Faculty Senate, Purdue faculty, and other public universities. Alberto Rodriguez, chair of Purdue’s University Senate, stated that the main goal of the university senate was, “...to encourage the commission to consider sending this deal back to the Board of Trustees and to include proper faculty and student input” (Quintana, 2018). Purdue University president Mitch Daniels and the Board of Trustees made the case that Purdue needed a strong online presence to fulfill its land-grant mission and acquiring Kaplan was the best way to achieve that goal. Daniels stated “None of us know how fast or in what direction online higher education will evolve, but we know its role will grow and we intend that Purdue be positioned to be a leader as that happens” (Herron, 2017). Daniels also cited Kaplan’s academic rigor and commitment to ethics as reason for the choice. “Academically, this is what we want to do. These are high-quality people; they’re high-integrity” (Herron, 2017).

Mergers and acquisitions require substantial justification given the amount of work and sometimes cost that associated with joining two entities. The decision must be one that fits the strategic goals of the organization and supports the institution’s mission. The potential benefit from creative unions are significant given the challenges
faced by all higher education—public or private, profit or non-profit. As education continues to evolve with a changing world, it is expected that more institutions will consider nonconventional solutions. This will of course challenge those rooted in academic tradition but it is unreasonable to assume the driving force of change can be checked.

References


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Brave New World: 
Leadership Empowering Faculty During LMS Change

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Abstract
During 2017, Kaplan University transitioned from a Learning Management System (LMS) that had been used for more than a decade to a different one that forced our experienced faculty to learn new approaches to teaching online. Composition leadership will share the proactive strategies used to empower faculty to find their new LMS normal.

Introduction
Change in academia, especially in online higher learning, is difficult for many professors. This is especially true for those who have spent over a decade honing and fine-tuning supplemental materials, figuring out how to best connect with students within an LMS, best practices, and using an existing LMS to teach and help students succeed. With an LMS change, it is easy for many faculty to feel as though the technological rug has been pulled out from under them, and they must begin from scratch. With change in technology, “Online instructors are significantly affected, as they are deep within the trenches of the technological world, teaching in the cloud versus a classroom,” (Velez-Solic & Banas, 2012). When this type of change happens, it is the responsibility of academic leadership to devise a plan to not only to provide supplemental training but to also present leadership driven motivation and support systems (Gautreau, 2011; Little, Gooty, & Williams, 2015).

LMS Transition
An LMS transition is never an easy one--especially when the existing LMS had been in place for over 10 years. In 2017, a large, Midwestern university faced that transition and challenged faculty to establish a new normal when the LMS moved from eCollege to Brightspace. While the benefits of the new LMS were beneficial and understood, faculty had been working with eCollege for over a decade, and because of this, the transition to Brightspace was difficult for some. The shift to the new LMS forced many to have to start from scratch with how they brought supplemental elements to the classroom. For others, it was as they were learning to teach online for the first time.

While there were training sessions and faculty guides provided to all, it very quickly became evident that more was needed. In their article, “Technology Adoption in Higher Education: Overcoming Anxiety through Faculty Bootcamp,” Johnson, Wisniewski, Kuhlemeyer, Isaacs, and Krzykowski (2012) state, “Higher education institutions must begin to recognize the relationship between theory and practice in educating our educators and develop robust faculty development programs that endure over time” (64). To that end, the university’s composition department leadership developed several avenues of support to foster the application of theory and practice that they could apply in their own courses.

Google Community
The first leadership driven resource that was put into place to help offer motivational support was the implementation of a Google Community solely focused on working with the new Brightspace LMS and aptly called “Working with Brightspace.” Originally, this group was born to be a casual place for composition faculty to vent frustrations and find camaraderie with other faculty who were having trouble acclimatizing to the new LMS. Very quickly, this resource grew and became open to all departments in the School of General Education (SoGE). Various discussion threads were added, and this resource took off. Faculty from all over the SoGE began coming to
this Community not only to vent but to also share tips, workarounds, and ask questions about how to better grade, view discussions, post visual announcements, and more. The synchronous availability of the “Working with Brightspace” Google Community has provided 24/7 support for faculty.

This group has now become a hub for cross-disciplinary discussion and collaboration for finding new, more efficient methodologies for teaching and the application of best practices within the new LMS. Rather than feeling overwhelmed and lost, faculty who engage in this resource now feel energized and excited about the new LMS and the opportunities it offers for teaching and learning.

**Brightspace Chats**

When faculty were transitioned to the new LMS, it was done so in waves. In the SoGE, faculty teach on one of three tracks, so the move to Brightspace started with one track, then a few weeks after that, the next track was transitioned and so on. To capitalize on the experience the first group had, composition leadership instituted casual meetings called “Brightspace Chats” where faculty who were leading the charge in terms of figuring out ways of working smarter not harder within their new setting could share what they had gleaned during their first few weeks. Also, this was a forum for faculty with existing Brightspace knowledge and expertise to share. These meetings were not only a forum to present information, but it was also an opportunity for attendees and presenters to ask and answer LMS related questions in a synchronous environment.

These chats grew and yielded information that, in turn, was shared via the “Working with Brightspace” Google Community and the Center for Teaching and Learning so that faculty across the university could benefit. These chats have also yielded more formal group meetings, various collaborations, conference presentation materials, academic paper submissions, and potential research projects within departments.

**One-on-One Meetings**

In addition to group setting support resources, it was key for leadership in the composition department to offer personalized, one-on-one meetings when the situation arose. Some of these one-on-one meetings were in the form of phone conversations to answer questions and or offer personalized motivational support. Other forms of one-on-one meetings were virtual ones using Google Hangout so that participants could share screens to illustrate issues and, conversely, demonstrate solutions.

**How to Videos**

Lastly, the final resources composition leadership offered faculty to help ease the LMS transition and offer support came in the form of videos. These videos were created based on two types of scenarios. The first type of video was in response to a challenge or issue that was communicated by many faculty members. One example of this type of video was to provide instruction on how to enter Course Learning Assessments (CLAs). Many faculty were struggling with this component, so a video was created and housed within the composition department’s Google site, along with other LMS videos, and or shared directly with faculty seeking out help via email. The second type of video was created on a case-by-case basis when faculty were having trouble visualizing a tip, problem solution, etc., from written material.

**Conclusion**

In the world of online higher learning, technology is always changing. The change from one LMS to another can present faculty with obstacles and discouragement. However, with LMS change comes the opportunity to motivate, collaborate, and grow via leadership driven support and education. What better way to overcome challenges new technology brings than to use other technology to close the gap and ease frustration so as to empower faculty to not only find their new normal but a better, stronger normal to serve students in their education and future successes?

**References**


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Full-Time Adjuncts: Our New Normal

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Introduction

With the needs of adult, higher education learners continuously evolving; higher learning institutions have had to become all about continuous learning, innovation, and thinking outside the box in order to best serve students, enrollment needs, and the bottom line. Additionally, in today’s world of the adjunct who works for multiple institutions to make ends meet, how can an institution stand out to exemplary adjunct faculty so as to hold onto the best of the best? This is where Kaplan University's Full-Time Adjunct (FTA) comes into play. These faculty members enjoy many of the benefits of a full-time faculty member without many of the demands and pressures full-time faculty contend with. In order to fully grasp the position of the FTA, it is important to understand who FTAs are, what their function is, where they exist in the university ecosystem, and how FTAs have responded to this new position.

Who are FTAs?

To begin, it is key to learning about the FTA position to understand what comprises this role. When the FTA position was initially created, it was the goal of Kaplan University to take from their very best, existing faculty throughout departments and schools under the KU umbrella. Therefore, it was crucial to establish criteria that would be sought after by leadership and deans alike. Since FTAs were serving students, the first facet in the search for the ideal candidate was to find adjunct faculty who consistently received favorable comments from students in course end-of-term surveys. By looking at this component, the first step in finding faculty who constantly went above and beyond for students could be taken.

From there, department leadership looked at how faculty met or exceeded department teaching expectations by reviewing one or more sections taught by adjuncts seeking to become FTAs. Determining what faculty not only met expectations but also worked diligently to follow and even establish best teaching practices in servicing their students became a highlight of seeking out the best candidates for the role. In addition, leadership also sought out those who consistently had low u-rates (student failure and withdrawal rates) in the sections they taught. By looking at consistency in this facet of teaching, it became evident that the faculty member was effective and strong across the board with his or her teaching capabilities; being able to navigate through trying classes and or classes that were always made more difficult with the start, stop, and start road bumps holidays and or Winter Break bring. The final component to what leadership looked at when looking for a stellar FTA was assessing faculty credentials to determine whether or not he or she could teach a variety of courses within a department. Many departments are responsible for more than one type of course, and having a faculty member with flexibility to teach more than one became an important part of the FTA search criteria.

The final component that worked hand in hand with student feedback and department leadership observations was determining who was invested in being a part of Kaplan University via activity in department, school, and university events. With many adjuncts serving many masters in order to make a living, FTA hiring committees had to see who had long-term interest with KU. Was the faculty member active in department meetings and community building opportunities and events? Did the faculty member attend school/university functions and or serve the university in any way? It was important to look at this component for FTAs as the role would be asking them to give the university more of their time, and it was key to identify who was truly invested and wanting to grow and advance within the university.
What Goes into Being an FTA?

Once what kind of faculty member would be sought out and hired into the FTA position, what FTAs could expect of the role was determined. The first, and most important, benefit of being an FTA was that these faculty would be guaranteed three courses per term with the option of up to five (depending on enrollment needs). This would give FTAs full-time teaching status, though FTAs are still paid by course like the traditional adjunct position.

Our FTAs are also given the option to enroll for benefits that are normally only offered to full-time faculty (vacation/sick/personal days, health and dental insurance, 401k, etc.). The main difference between the FTA and regular full-time faculty is that FTA faculty do not have any university service obligations and are not required to delve into scholarship, such as conference presentations and publications, as regular full-time faculty are. Having said that, FTAs are, of course, and have been encouraged to get involved in many of the events and scholarship opportunities that regular full-time faculty engage in, which most do automatically making them desired candidates at the start.

Where Throughout KU do FTAs Exist?

The FTA position is present throughout, expanding out over all the various schools and departments that compose Kaplan University. In the spring of 2015, approximately 200 FTAs were hired across the university (soon to be Purdue Global pending HLC approval). The KU faculty population breakdown after all initial FTA hiring was completed is listed below:

**Figure 1.**
*KU Faculty Breakdown (late 2015)*

![KU Faculty Breakdown (late 2015)](image)
In the School of General Education alone there are currently 42 FTAs (breakdown by department listed below).

Table 2.
KU Department Breakdown

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of Full-Time Adjuncts (FTAs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>14</td>
</tr>
<tr>
<td>Science</td>
<td>10</td>
</tr>
<tr>
<td>Mathematics</td>
<td>9</td>
</tr>
<tr>
<td>Humanities &amp; Social Sciences</td>
<td>9</td>
</tr>
</tbody>
</table>

How Have Our FTAs Responded to This New Position?

Overall, FTAs in the KU School of General Education have been very pleased with their new positions, citing job security, benefits, more respect, a deeper sense of belonging, closer relationships with faculty and administrators, and having the opportunity to reach more students as their top reasons for enjoying this position more than their previous one as part-time faculty members. In addition, several FTAs have been able to reduce the number of institutions they teach for in order to meet their financial needs.

Conclusion

By looking at the FTA position in terms of addressing the who, what, where, and how, it becomes even more evident that adjuncts are the legs all institutions of higher education stand on. Administrators face many challenges in terms of adjunct faculty satisfaction, engagement, and retention. A proposed solution to many of these challenges is to create FTA positions.

When considering whether or not to implement a similar position, the following questions must first be answered:

1. Can a full load of courses be offered to these instructors indefinitely?
2. Can the institution provide benefits (health, retirement, etc.) to these instructors?
3. Can these instructors be exempt from the scholarship requirements of regular full-time faculty?

Suggestions for research on this topic are welcomed and encouraged.

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A Spoonful of Sugar: Engaging Online Students with Smore

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Abstract

With Kaplan University’s 2017 Learning Management System (LMS) transition from eCollege to Brightspace, the desire to investigate the use and effect of implementing visually enhanced announcements in composition courses to increase student engagement and success was born.

Introduction

In the ever-evolving world of higher learning, educators work constantly to find the best and most efficient methods of teaching students. The online environment poses particular challenges, as educators and curriculum designers alike must find innovative ways of delivering information and connecting with adult learners with varying learning styles, different backgrounds and previous experiences with higher learning, and often, many responsibilities outside of the virtual classroom. Announcements serve as one of the main methods to deliver information and engage students in a virtual classroom. They are typically the first element students see in a class, and because of that, they serve a very important purpose. Faculty construct announcements to keep students up to date on classroom events, preview upcoming assignments, and share information that will keep students on task and help them succeed as they move through the course. However, what happens when an LMS change poses challenging obstacles where announcements are concerned?

LMS Transition

Educators can all agree on one thing: change is inevitable. In 2017, Kaplan University transitioned its online classes from eCollege to Brightspace. While the benefits of the new LMS were numerous, faculty had been working with eCollege for over a decade, making the transition to Brightspace difficult for some. Faculty had honed many best practices over the years to deliver information and assist students, and the shift to Brightspace forced many to reinvent how they brought supplemental elements to the classroom. What made the transition even more challenging was the text-heavy nature of the LMS. Many faculty members became increasingly concerned that students were not reading the class announcements and were thereby missing pivotal information needed to succeed. As a result, faculty started seeking out multimedia resources, including Smore, that could be brought into the classroom to give the interface a visual respite and mitigate the text-heavy nature of a basic Brightspace announcement.

What is Smore?

Created in 2011, Smore is a document design system with over two million users who publish over one hundred thousand flyers and newsletters monthly (Smore, 2018). Originally intended as an online marketing tool to empower small businesses and individuals, the Smore system allows users to create visually engaging flyers and newsletters with user-friendly tools (Smore, 2018). Smore’s wide selection of background and layout options, combined with its drag-and-drop image insertion, make it one of the easiest-to-use document designers on the market. For our purposes, Smore flyers and newsletters can be easily utilized in the Brightspace classroom in the announcements area.
**How Faculty Use Smore**

Smore has several different functions that make it a particularly useful tool for creating visually engaging announcements for use in the Brightspace classroom. The system has a selection of templates that utilize effective instructional design concepts to make flyers and newsletters that are easy to create and finished products that are even easier to navigate. Users have the ability to select vivid background images, allowing for announcements to be tailored to specific events or purposes. Currently, several background collections are education-based, allowing instructors to select backgrounds with an educational theme. Within each template users can adjust individual modules to fit their specific design needs and requirements. Users also have the ability to embed videos, links, or images, attach files, make flyers public or private, send flyers to a mailing list, and easily share their creations on social networks. Users have the option of embedding their creation with an html code or providing a direct link to each document. Each Smore creation also provides its own analytics, including important information such as the number of visits, visitor metrics, time spent, and viewer locations. A Smore account also gives users access to the Educator’s Hive, which is a clearinghouse of shared newsletters and flyers created by other educators. These flyers and newsletters can serve as inspiration and provide examples of the variety of approaches and topics Smore can address in the classroom.

**The Use of Visuals in Announcements**

Visuals and graphics, important components of the Smore document design system, allow instructors to more effectively instruct, orient, and motivate students from diverse backgrounds and roles (Ley & Gannon-Cook, 2014). Research has shown that “pictures seem to be more easily remembered than words, perhaps because most humans are visual thinkers and their pictures are situated in cultural experiences and memories” (Erstad & Wertsch, 2008, p. 2140). It is for this reason that these “representative elements” are particularly useful in classroom announcements, which are vital for providing students with overviews of the course and individual units, sharing relevant reminders, and improving overall student engagement. Not only can graphics cue the learner to important information, but research has also shown that students who view graphics and visuals combined with text-based information are much more likely to be able to recall the information than if it were provided only as text (Clark & Lyons, 2010). The Smore system allows for the effective use of visuals and graphics by creating multimedia announcements that not only share important information, but enhance student engagement by “facilitating active learning, personalizing student-faculty connections, and enriching learning experiences” (Mandernach, 2009, p. 5).

**Best Practices for Announcements to Enhance Student Success**

While tools like Smore offer faculty an array of options to make announcements more appealing, faculty still need to follow best practices for announcement design to make the most of these tools. To ensure more students read the announcements and get the information they need to succeed in their courses, careful attention to the announcements’ timing, layout, and phrasing is required.

Announcements should be used to foster greater interaction between faculty and students, one of the best practices in online education (Kontos, 2015), as well as to create a positive classroom environment. Skiba et al. (2016) emphasize the importance of “maintaining a positive and organized classroom setting free from disruption” (p. 120), and effectively-designed announcements ensure better classroom management.

Establishing specific types of announcements using a “prepare, remind, review” mindset will ensure that students know what to expect each week. Announcements should be part of the scaffolding process, preparing students so they will better understand the expectations for an upcoming unit and assignment, reminding them when work is due, and reviewing how students’ work met (or did not meet) the learning outcomes. For example, if a unit includes a live seminar, quiz, discussion, and assignment, the unit announcement posted in the course should include information about each of these, note due dates, and provide an overview of the unit’s learning outcomes. An end-of-unit reminder would ideally be posted at least one day prior to the close of the unit and provide a checklist of items that need to be completed as well as a reminder to reach out to the instructor to ask questions. Finally, a wrap-up announcement posted after a unit’s close could review the key concepts covered in that unit and note the successes and challenges demonstrated by the students’ work in that unit. If a number of students had a difficult time creating a persuasive thesis statement and instead created informative ones, the wrap-up announcement could provide examples, link to a resource on designing persuasive thesis statements, and encourage students to reach out to the instructor if they are still struggling with their statements after reviewing the resources in that unit.
Announcements should be concise and specific to ensure that students read the announcements and retain the information. Using a standard template with section headers helps students know what to look for in each announcement, and when using a visual tool like Brightspace, the same background could be used for each specific type of announcement, such as the unit overview. Limiting the amount of text and using short bullet points and checklists will make important information stand out more clearly. Finally, embedding relevant links to assignment instructions and resources can help students more readily understand the expectations and know where to go if they need additional help.

Duplicating the announcements with email reminders will reach more students each week as well. Students may not check into class every day, but many do read email daily. Brightspace also allows students to sign up for alerts for any new announcements posted in the class, so faculty should provide students with instructions for doing this and encourage them to use the alerts. Using as many methods to reach out to students as possible will ensure that more of them are aware of class expectations and do not fall behind.

Conclusion

Certainly, research has shown that “visual cues help us to better retrieve and remember information” (Kouyoumdjian, 2012, para. 1). The background visuals and color enhancements of a Smore announcement are designed to encourage students to pay closer attention to what they are reading. However, little evidence has been gathered thus far to prove that classes using Smore announcements have higher retention rates and better performance on learning assessments. Articles related to the use of Smore in classrooms primarily focus upon high school courses and involve the students’ use of Smore to create projects. The Smore CEO, Gilead Avidan, indicated in an email response to a query about whether they had any data to show that using the announcements led to better student outcomes that such data was not available but that they would be interested in any results generated by such a study. This suggests a need for further research exploring a correlation between the visually enhanced announcements and better student outcomes.

References


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The Revolving Door of Writing Across the Curriculum Leadership

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Abstract

Writing Across the Curriculum (WAC) has been a pillar of higher education historically and globally for nearly 50 years; similarly, the study of leadership dates back decades. Ironically, little attention has been given to WAC leadership in higher education, even within today’s rapidly advancing context of technology and globalization. This paper will share the results of a recent qualitative study that sought to discover the ideal characteristics of a global WAC leader and that was conducted at three institutions of higher education on three different continents: Midwest Global University in the United States, Australia University, and Singapore University.

Introduction

For over four decades, Writing Across the Curriculum (WAC) has been a cornerstone of higher education. The importance of learning to write/writing to learn has been emphasized by professional organizations (cf. CWPA, NCTE, & NWP, 2011; INWAC, 2014) and educators; WAC and best practices in writing instruction are commonly studied (c.f. Condon & Rutz, 2013; Thaiss & Porter, 2010). The study of leadership dates back for at least the same amount of time. After technology became a catalyst for the growth of multinational organizations after the turn of the new millennium, there was a shift in the focus of leadership studies from individuals in specific job roles or with specialized knowledge of one other culture to include the context and constituents (Hitt, Keats, & Yucel, 2003). More recently, leadership studies have focused on defining global leadership by characteristics (Mendenhall et al., 2013). However, rarely within this academic discourse have the two areas of WAC and leadership been brought together. Therefore, this exploratory qualitative study using the Delphi Technique sought to discover the existing and ideal perceptions of global WAC leadership characteristics at three representative international postsecondary institutions located in the United States, Singapore, and Australia.

Methodology

Three representative institutions of higher education (IHEs) were selected on three different continents: Midwest Global University (MGU), Australia University (AU), and Singapore University (SU). Each operates multiple ground campuses and offers online classes; all three are career-focused and historically have served marginalized, diverse student populations. There are some differences as well: MGU offers more traditional undergraduate and graduate degrees while AU and SU focus primarily on teaching English to English Language Learners (ELL). The study was conducted using the Delphi Technique which is accepted as “a widely used and accepted method for achieving convergence of opinion concerning real-world knowledge solicited from experts within given topic areas” (Hsu & Sandford, 2007; Habibi, Sarafrazi, & Izadyar, 2013). The Delphi Technique is especially helpful in areas such as WAC leadership in which little research has been conducted (Kezar & Maxey, 2013). The technique is also valuable as an equalizer because it lessens the chance of group dynamics influencing responses (Donohoe, Stellefson, & Tennant, 2012; Habibi, Sarafrazi, & Izadyar, 2013).

A leader was chosen at each of the three locations to nominate 16 participants: four administrators, four full-time faculty, four part-time faculty, and four in student support (e.g., tutors). The goal was to achieve a representative sample size as appropriate for the use of this technique (Hsu & Sandford, 2007; Habibi, Sarafrazi, & Izadyar, 2013). The study was conducted online within the VPN, Duo Security, password-protected Google email system of MGU, and all appropriate considerations were taken to protect the identities and informed consent of participants. Nominees could opt-out at any time.

1 Pseudonyms for the actual locations.
A series of three surveys was conducted using Google forms that allowed the responses to be given in private and collated automatically into a searchable, filterable spreadsheet. Survey One consisted of open-ended questions to ascertain the context within which participants understood the meaning of ‘WAC’ and the level at which WAC exists at their respective institutions. The WAC taxonomy of Condon and Rutz (2013) was used to help operationalize those levels into “Foundational,” “Established,” “Integrated,” or “Institutional Change Agent.” Survey One also included open-ended questions intended to help discover the existing and ideal characteristics of WAC leadership at each location. The responses to Survey One were analyzed using standard qualitative data analysis strategies, such as sketching ideas, identifying meaningful content and statements, coding, and the discovery of points-of-view (Creswell, 2013). The results of the analysis were then synthesized into Survey Two and finally into Survey Three to gain consensus and as part of the member-checking process (Creswell, 2014; Hale, 2014; Pyrczak, 2008; Hsu & Sanford, 2007).

Results

Throughout the study, there were few discernable differences in responses based upon location or role.

The participants were able to demonstrate an understanding of context by agreeing on the following WAC definition:

A comprehensive, strategic approach with an organizational dedication at all levels toward ensuring that students understand the essential nature of writing across their studies and their particular disciplines with emphasis on writing for academic and career success. WAC also ensures consistency of writing standards and includes the assessment of learners’ development of writing skills.

The participants’ definition aligns with those found in the literature (cf. INWAC, 2014). Of the 30 respondents, 43.3% placed the level of the WAC initiative at their institution at “Foundational,” 26.7% at “Integrated,” 16.7% at “Established,” and 13.3% at “other,” stating that WAC was rarely or never discussed as a term. The descriptors the participants provided for these designations aligned well with those of Condon and Rutz (2013) in their study of WAC taxonomy except no participant selected the most developed level of “Institutional Change Agent.”

When asked about existing WAC leadership characteristics, participants demonstrated the same lack of awareness that is noted in the extant literature (cf. Thaiss & Porter, 2010; Condon & Rutz, 2013): 30.6% responded that “no one specific is the WAC leader (e.g., “WAC Director); 25% stated that WAC was tacked onto the duties of a Writing Program Administrator (e.g., a department chair or writing center manager); 19.4% stated that an upper-level administrator made decisions about writing at their institution, and an equal percentage responded that there are “multiple individuals with shared WAC responsibilities; and 5.6% stated there was a specific individual who oversaw WAC. Again, it is notable that there was no consistency by role or location, adding further indication that WAC leadership is rarely considered at IHEs.

Furthermore, the characteristics cited by participants about existing WAC leadership characteristics tended to fall within the somewhat nebulous and functional view higher education traditionally has for the WPA role. Whoever leads the WAC initiative at each location, basically performs tasks, such as collaborates with others to create and manage resources. However, when asked about ideal WAC leadership characteristics, there was a notable switch in perception to the five main characteristics of a global leader as one who 1) inspires trust; 2) thinks strategically; 3) engages proactively; 4) empowers followers; and 5) offers a shared vision (Hitt, Keats, & Yucel, 2003; Antonio & Sera, 2015; Lewis, Andriopoulos, & Smith, 2014; Agbor, 2008; Kuyatt, 2011; Darling, 2012; Yukl, 2015; Kurke, 2007; Bjerke & Renger, 2017; Serfontein & Hough, 2011).

Discussion and Conclusion

The importance of writing has not been diminished as technology and globalization have created a more dynamic and ever-changing context for multinational organizations including higher education. Some have even argued the term should be changed to ‘Writing Across the Globe’ (Rammia, 2015). The key takeaway from this exploratory study may be that educators need to reorient the way WAC is lead at their institutions to help students “write to learn and learn to write” more successfully. Perhaps a new term and perspective of the WAC WPA as a global leader is needed. Perhaps a new term, ‘global WAC leader’ may be warranted, too.
References


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The Sky Isn’t Falling: Helping Faculty through Times of Change

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Abstract

Change is inevitable, especially within the ever-shifting, dynamic context of higher education (Lloyd, 2014). Faculty are often caught in the middle. Some deal well with change or can at least accept it. Others panic. This article will share strategies for helping this latter group deal positively with change.

Introduction

Until recently, higher education enjoyed a long period of stability within which tenure and respect for the academy provided little incentive to change (Lloyd, 2014). With the turn of the new millennium, however, increasing globalization, technology, socio-political demands for accountability, and other factors have propelled most universities into a world within which they must learn to quickly evolve to remain competitive, relevant, and solvent.

Context

One of the groups to feel this change most are faculty. Historically, teaching was considered a stable profession. Tenure and a large population of Baby Boomers combined with the respect shown to American institutions of higher education (IHEs) perpetuated a status quo that did little to spark innovation. Over the last 15 years, however, this context has changed. The onset of virtual learning and technology forced faculty to not only learn new skills themselves, but also the ability to train and assist students in their use. Budget constraints have bumped up class sizes in subjects such as writing by twice as much, and an increasing number of learners arrive underprepared (cf. Harvard Graduate School of Education, 2011). Greater accountability with student outcomes, gainful employment, and accreditation have added even more pressures to faculty. Within this context of being asked continually to change, jobs have become increasingly unstable as the larger class sizes and decreasing enrollment nationally have made less work available. Tenured positions have also increasingly given way to adjunct or term-by-term contingent roles. Some schools have gone out of business while others have merged or found new business models. The sum of all these changes and insecurities has overwhelmed many faculty who learned and began their careers within the halcyon days of higher education (Lloyd, 2014). Some are able to adapt to change and maybe even thrive within it. Others struggle and need leadership support to move forward.

Strategies

How can leaders help faculty acclimate to change? First, realize that human nature is naturally resistant to change. The above examples which disrupt the former status quo of higher education are especially difficult for faculty to deal with for at least one obvious reason. As Lloyd (2014) explained, the skills that served them well in the past may suddenly not work within the new context, causing a “crisis in self-esteem” (p. 2). These faculty may resist the change, experience physical ailments related to their stress, or even leave the profession. The main way leadership can help is to keep faculty as informed as possible about upcoming changes and their impact; then provide as much proactive preparation and ongoing support as possible in the form of professional development. Leadership must be innovators in building the knowledge and therefore confidence base of their faculty. Formal meetings and informal opportunities to share experiences with the change and ask questions should be combined with 24/7 asynchronous
venues, such as online sites and communities. Leaders should always provide a method of reaching out for assistance when faculty are struggling with change.

Second, leadership should be prepared to acknowledge and help guide the emotions of faculty. Sometimes this may involve clearly setting aside any of the above rational approaches, such as training, so that faculty can share how they are feeling about a change. In fact, some scholars consider “leading with emotional labor,” especially in regard to positively redirecting the negative emotions of followers, to be a principal task of any leadership role (Little, Gooty, & Williams, 2015).

Four interpersonal emotion management (IEM) strategies are helpful to consider:

1. **Situation Modification**: Change or modify the change or its impact when possible (e.g., move a deadline).
2. **Cognitive Change**: Reframe the perspective on a change or its impact when possible (e.g., failure as redirection or clarification).
3. **Attentional Deployment**: Redirect faculty away from harmful emotions toward more positive ones (e.g., using humor).
4. **Modulating the Emotional Response**: Directly requesting (negative) emotions be set aside (e.g., telling faculty to set aside their feelings to look at a change rationally) (Little, Gooty, & Williams, 2015).

Each of the above strategies for acknowledging and helping guide faculty emotions draws from one’s own experience. Leaders may benefit by taking a bit of time to reflect on how they might successfully overcome negative emotions when dealing with an issue in their own lives; then share or model that strategy with their faculty (Little, Gooty, & Williams, 2015; Parrish, 2015).

As indicated by the above two strategies, emotional intelligence has been identified as necessary for effective leadership, especially empathy (Parrish, 2015). Of the emotional intelligence competencies, Parrish (2015) found that empathy was as critical a skill for academic leadership as providing guidance to followers and modeling self-management. Empathy was defined “as the need for leaders to accurately identify and understand a person, their concerns, needs and abilities and then appropriately manage the person in light of this understanding to promote productivity and success” (Parrish, 2015, p. 833-834).

Therefore, a third strategy is for leaders to place themselves as closely as possible in the place of faculty who are experiencing times of excessive change and taking some time to reflect on what might be helpful. For example, do faculty just need a chance to share their feelings and/or process their thoughts to reorient themselves in a more positive direction? Despite their struggle(s) with change, do they have some strengths that might be utilized for the benefit of the team, or is there a way these faculty might be empowered to help the organization move forward through the changes? Empathy also involves opportunities to discuss and frame changes in ways that make them more manageable for faculty individually and collectively (Parrish, 2015).

**Conclusion**

Change is inevitable, and not all faculty will handle change well. However, by applying the above strategies, leadership can help faculty navigate change and possibly even thrive on it. Faculty may also be able to model a healthy approach to change for higher education’s most important asset: students.

**References**


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Abstract

Business leaders significantly mold higher education distance learning when they identify and communicate what their workforce needs to succeed then help programs identify what skills to cultivate in students. The next natural step appears to be using the same strategies that effective business leaders use with employees to teach students. If higher education distance faculty accept at least some value to using business leadership strategies in their teaching, they open the door to deliberately applying and evaluating these approaches and hopefully cement them as evidence-based best practices.

Background

Across distance learning, business leaders play a significant role in program outcomes, course design, and skill assessment. They know the skills needed by their workforce and how to impart those skills to employees, suggesting they also know how to teach the skills to students. Kaplan University, a nationally recognized online university focused on career education for adult learners involves business leaders – and leaders in other sectors – in designing outcomes and assessments. Kaplan-soon to be known as Purdue University Global – takes the business/higher education relationship to the next step and readily engages professional leaders to teach courses in their disciplines. These professionals bring the skills they have cultivated in their professional lives to the classroom to improve classroom management, student engagement, teaching, and learning. The strategies could easily transfer to the classroom for other educators, but many regard merging business and teaching with skepticism. Further blending professional leadership best practices into instruction shows promise for improving teaching, learning, assessment, and student success, but implementing their application requires examining the rationale behind why they may work, identifying which best transfer, addressing educator concerns, and cultivating buy in to facilitate larger-scale application.

Rationale

The rationale for incorporating business practices into teaching and learning stems mainly from the shared characteristics of good leaders and good educators. Recently, in the Harvard Business Review, Sidney Finkelstein (2018) notes “The Best Leaders are Great Teachers” (142). Experience shows the veracity of the converse—great educators are the best leaders. When educators tap into their leadership potential, it provides a wellspring of methods to improve teaching and learning. These educators routinely model professionalism, but they less readily consider the value of using other business leadership techniques in the classroom. In an interview with Sarah Green Carmichael (2018), Finklestein notes the more open teachers or leaders are to pursue learning themselves, the more others want to learn from them, suggesting that a willingness to study further blending professional leadership best practices into instruction alone can improve teaching, learning, assessment, and student success. Still, deliberate action starting with identifying transferable practices holds the most promise.

Identifying Transferable Practices

Bringing business leadership practices to the classroom begins with analyzing what types of strategies that encompasses. Excellent business leaders demonstrate many effective strategies, but not all transfer to the classroom.

Leadership strategies educators could apply may include:

• Applying professional communication strategies to improve instruction;
• Using time and task management habits from the workplace to enhance learning;
• Adapting motivation strategies from effective business leaders to encourage learners;
• Employing innovation strategies from the professional world to engage students;
• Using professional leadership tactics for risk management - especially owning and learning from mistakes - to support students; and
• Encouraging the constant reflection activities used by effective leaders to improve both teaching and learning.

Each aspect touches on the other and all are part of accepted best practices in higher education but are not always applied in all disciplines.

An Example

For instance, consider communication and how it relates to instruction. Students often divide themselves into two categories - technical, step by step learners and exploratory, hands on learners. Faculty do the same with their teaching, often based on content areas. As a result, teaching and learning functions more holistically than students would like - and need. This disconnect appears frequently in courses where students from myriad backgrounds and interests come together. Even in courses that emphasize the business concept of “clear, concise, and correct” communication, student confusion may result as an unintended consequence of what Rogers-Shaw, Carr-Chellman, and Choi. (2018) call the “one-size-fits-all” (p.20) approach. Many students want a clearer set of instructions, limits, possible outcomes, and evaluation than they see in their professional lives, while students who shy away from multiple steps often need to develop processing skills. The challenge becomes how educators address what various types of students need and balance it with their own teaching approaches and strategies.

Finding Balance

The solution to finding an equilibrium in teaching and learning comes from the concept of Universal Design for Learning (UDL). Rogers-Shaw, Carr-Chellman, and Choi. (2018) urge overcoming the cookie-cutter approaches they document by changing the thinking on teaching and learning practices and adopting the UDL principles advocated by Meyer and Gordon (2000; 2014). Often, UDL guidelines include business-related practices such as clarifying communication and providing process-oriented instructional materials. This approach to teaching and learning improves student learning and outcomes by meeting needs of individual learners yet remains flexible enough to allow educators to keep and grow their own teaching. Once educators balance what students need with how to most effectively transfer to teaching, the next step involves encouraging faculty to explore what teaching with certain strategies encompasses and how to transfer apply it in their courses.

Explore and Apply

Encouraging educators across disciplines to locate, apply, and master prescribed business strategies that improve teaching and learning involves multiple approaches. First, encourage educators to informally explore the strategies through discussion, collaboration, and self-directed research. When urged to examine this concept, many educators discover they already apply some of these practices. According to Mary Ellen Nicol (2018, Personal Communication), a veteran math and foreign language educator now working in work-force training, “I was teaching like a businessperson all along and never realized it.” Familiarity lessens educators’ skepticism over connecting business leadership and teaching. Once educators accept at least some value to using these strategies, formalizing training, developing pilot projects, and designing collaboration or mentoring opportunities allow them to deliberately apply and evaluate evidence-based practices into their teaching. Often, these collaborative approaches provide the unintended benefit of energizing faculty and improving many aspects of their professional lives, including teaching, development and scholarship.

Conclusion and Suggestions for Further Research

As with any teaching or learning strategy, one size never fits all. Application of business strategies into teaching appears to show promise, but appearances can be deceiving. Improving teaching and learning in any aspect requires evidence-based practices. When educators know what they are doing and why, they can measure effectiveness better. Further research needs to be done on the efficacy of business practices in the classroom. That begins with
encouraging faculty buy-in followed by large-scale piloting of these strategies that measure their impact on students. Only then will the next step in marrying teaching and leadership become clear.

References


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Alexa…Can AI Enhance Student-to-Content Interactions?

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Abstract

This paper is an exploration of how the affordances of personal AI technology, such as individual data collection and cloud-based voice service, might enhance student engagement with course content in the online learning environment.

Introduction

As educators of adult learners, we are always looking for innovative ways to enhance student-to-content interactions. Long established adult eLearning philosophy claims that relevance and relationship to content creates engagement, knowledge acquisition and retention for the learner (Saba, 2003). How learners relate to the topic, connect and practice new knowledge will affect motivation and effort applied to the learning process. A variety of web and e-tools have been used to enhance student-to-content interaction: interactive exercises, videos, slide presentations, podcasts, games, Ted talks, etc. Yet even with the implementation of new tools, engaging online adult students with course content remains a struggle (Kanuka, 2008). We aim to explore some of the challenges to student engagement with content and think about how AI technology might address some of these challenges.

Challenges to Learner-to-Content Engagement in e-Learning Environments

Content Curation

Content curation traditionally falls to the instructor. This means that the instructor’s preferences, interests and values are reflected in the content. However, learners are diverse and they may not connect to the material in the same way that the instructor does or expects of students. Students may not see any personal relevance in the offered materials. When an instructor tries to provide a large pool of resources for diverse learners to choose from, students become overwhelmed with the options and will often choose not to engage with any of the resources.

Can AI technologies recommend individualized supplemental course material to students in an effort to build student relevance with course content?

Self-Direction, but Little Agency

Students are expected to have self-direction in moving themselves through content in an online course, but are given very little agency in selecting their content and way of learning. They have little agency to ask questions or “frame the question” the way that we do in informal learning. Whether in an in-class or online learning environment, the most meaningful learning opportunities come from times when the student chooses the content, designs their own learning experience, and builds relationships along the way.
When online learners lack agency in defining their learning paths, they cannot see the relevance of the content they are provided and they disengage. Additionally, the challenge in developing effective personalized functions such as content management, learner model, learner plan and instant adaptive interaction is getting the technologies to work together to enable personalization by recognizing an individual learner’s e-learning pace and then reacting back to that learner (Xu, D., Wang, H., 2005).

CoCreateX is a community of people who help each other to complete projects, patent inventions and start and grow businesses (Powley, 2018). CoCreateX projects lead to inventions, products, businesses and life changing experiences and opportunities. Their Adventure to Venture Program is an example of helping people to discover their passions. The learning takes place in a variety of modalities, but the education is entirely learner driven and the CoCreateX community acts as assistants, sounding boards, guides, resource providers, networkers, technology crews, whatever the learner needs to take the next step (Powley, 2018). What they find is that the most impactful learning experiences begin by doing something one loves to create value for someone he/she cares about.

The online design challenge is can the use of artificial intelligence technologies create personalized “sweet spots” for each learner where the content is relevant, accessible and reliable?

Asynchronicity

Online learning is mostly asynchronous and there are not enough mentors for every learner. Instructor/student interaction is spread over time and by the time the learner interacts with the instructor the “need-to-know” moment may be gone. Discussion Boards once responded to are “out of sight, out of mind” so there is little spontaneous collaborative learning occurring.

Can online instructors employ AI technologies to provide immediate feedback and challenge students through in-the-moment new ways of thinking, new thought processes, and therefore cognitive development?

Can AI Assistants Help Learners Engage with Content?

“Alexa, what is A.I.?”

“AI generally stands for Artificial Intelligence. As a branch of computer science research, AI is defined as the study of devices that perceive their environments and take actions that maximize their chance of success at some goal. More commonly, the term AI is used to describe when machines are seen as mimicking human cognitive functions such as learning and problem solving.”

To help clarify what Artificial Intelligence is, think about how AI is involved in your life. From Netflix recommendations, GPS voice navigation, automated vacuums, to online ads popping up based on your past purchases or searches. These are all examples of how AI is integrated into our lives now. In education, AI is used to correct multiple choice quizzes, deliver adaptive lessons, yet appears to be less sophisticated than AI used outside of education.

As educators, can we enhance the student learning experience by introducing ways in which students engage with course content using personal AI assistants, like Amazon Alexa? Currently, an Amazon Alexa device can be used to interact with other smart electronics to dim living room lights, to play your favorite playlist of ’40s pop hits, to raise or lower your home’s thermostat, among other things all by simply uttering a short list of commands. Each year A.I. assistants get smarter and smarter and can interact with a growing number of other smart devices. But what about course content? What can AI assistants do now to bridge student interactions with course content and what are our hopes and expectations for the future of AI and AI assistants in higher education?

Relevant Engagement: Addressing Content Curation

Most of us are familiar with at least one online content repository that provides recommendations based on what we’ve chosen to consume and the ratings we’ve assigned to content. Streaming services like Netflix, Hulu and Amazon Prime all use algorithms that collect user data to recommend content that the user is likely to enjoy.
This issue of delivering relevant content to individual learners in an online learning environment could be addressed with a similar solution. With the help of AI, instructors can curate a large diverse pool of “tagged” resources. Students would have ability to search that pool for content. Depth and breadth is available in the resource pool, but the learner decides where to “float” and where to “dive” deeper.

AI pre-assessment of a student’s 1) current understanding, 2) values and interests, and 3) preferred learning style/content delivery methods can guide what resources are recommended. User searches and viewing behavior can additionally influence which resources from the curated pool are presented.

AI assistance in content curation could take the guesswork out of the instructor’s job of deciding what is relevant to students and reduce decision paralysis and cognitive load students experience when presented with a large amount of content.

Affective Engagement: Addressing Agency

The affective experience of informal learning, the ability to find content that builds relevance and makes sense to the student, without having to look to an authority for direction, helps build confidence and agency for the student. In order to address agency, we must first understand how engagement happens for the learner.

There are three types of learner engagement: behavioral, emotional, and cognitive. Situational interest and self-regulation are found to be directly related to these three different types of engagement while computer self-efficacy did not appear to be associated with any of those engagement types. Online activities and tools such as multimedia and discussion boards may increase emotional engagement in online learning but not necessarily behavioral or cognitive engagement. What that tells us is that educators need to help first time online learners with their technology to help increase their emotional engagement and cutting back on their anxiety levels. It also tells us that educators need to help learners with strategies for increasing their self-regulation in online learning (Chih-Yuan Sun, J., Rueda, R., 2012).

Using natural language to ask questions to a non-judgmental guide, such as an AI assistant, can increase agency and reduce anxiety. Informal learning has few perceived risks (bad grades, being seen as “stupid”), but formal learning is plagued with perceived risk. AI could provide a risk-free environment for exploration. If learners have command of the technology tools to interact with course content in a casual environment, prior to a formal online learning environment, it contributes to more self-regulation, exploration, and enhances their personal learning experience and can become more meaningful. With increased confidence and practice with course related technology tools, the learner has a higher probability of finding relevance in their learning (Chih-Yuan Sun, J., Rueda, R., 2012).

Effective Engagement: Addressing Asynchronicity Challenges

When finding low-level information, current AI technology can help facilitate web searches that can aid in the development of information literacy skills and knowledge building through access and retrieval of information. Though it can facilitate these processes and provide links at the time of the search, learners need to know key word prompts and there is no evaluation of social or cultural context or relevance.

Currently in the field, publisher produced adaptive software is used to provide learners a real time walk through expert systems but only in very specific contexts such as a math or physics curriculum.

Machine Learning algorithms, programs that glean patterns from data and provide insights and suggestions, help educators identify learning gaps in an asynchronous time frame, but other AI-based applications like Third Space Learning, Thinkster Math and Carnegie Learning [Math], online math tutoring platforms, use data to provide intelligent tutor systems to help learners adopt productive learning behaviors as they work through problems (Dickson, 2017).

Using predictive analytics could enrich, specialize, and refine learning, creating broader learning strategies for immediate feedback to the learner. Providing more agile and dynamic tools that adapt to the rhythm of the students’ learning style can make the learner’s process, and assessment of it, as important as the outcome. The best educational application for AI software will be expert systems that can provide at-the-moment guidance through more generalizable expert thought processes (evaluating a source, writing assistance, etc.) using natural language.
With AWS Lex, the same deep learning technologies that power Amazon Alexa are now available, enabling any developer to quickly and easily build sophisticated, natural language, conversational bots (“chatbots”). The chatbots create lifelike interactions that in combination with adaptive and predictive analytics could provide a synchronous exchange that can challenge a learner beyond course content knowledge to reflect on one’s beliefs, to increase critical thinking, and move along the continuum of self-directed learning.

Reflection/Metacognition is a very effective tool for engaging with content and creating personal relevance. Lacking the benefit of instructor contact and guidance to challenge learners to question and reflect in a synchronous learning environment, AI reinforcement learning in combination with deep learning, a technique that involves using a very large simulated neural network to recognize patterns in data, could become the key in programs comprehending the learners’ style and process and blended with natural language technology, prompting them to reflect on their understanding and personal relevancy as they work through content. “How do you feel about that?” “Does that make sense?” “What does this assume?” (Knight, 2016).

Caveats and Concerns

It is extremely important to note that AI technology alone will not be able to address the challenges we have laid out. Course design (the assignments, assessments, prompts and feedback) will need to encourage agency and personal relevance. Assignments will need to be open ended enough such that a wide variety of resources and learning paths will be appropriate for assignment completion. Assessments will need to focus on process and end-product quality rather than specific answers and outcomes. Both instructors and students will need to embrace the idea that the student is in charge of determining their learning path.

Conclusion, Considerations, and Next Steps

The possibility of optimal student engagement in asynchronous online classes seems closer than ever through AI technology.

The technology is already available and used in the marketplace but educators cannot implement it without help from developers. The future of AI integration in online courses will rely on educators initiating conversations with developers to integrate AI technology into learning management systems and equip AI assistants with skills having educational purpose. With developers and educators determining which technologies will work together to create a personalized learning experience for online learners, the effective use of AI in distance education can be realized.

With the development of AI technologies in education, our hope is that AI can enhance and support learners’ engagement in asynchronous online learning environments by providing personally relevant information that clarifies and expands upon course content, building learner agency in a user-friendly way (with natural language), and issuing immediate feedback and guidance to help promote content knowledge and personal development.

References


Powley, Nicholas, CoCreateX CEO. Interview on 2/26/2018.

Saba, F. (2003). Distance Education Theory, Methodology and Epistemology: A Pragmatic Paradigm, Handbook of Distance Education. Pp. 3-19.


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Guidelines for Cyber Hygiene in Online Education

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Abstract

Online education brings access and convenience to higher-education learners all over the world. At the same time, the cyber environment creates unprecedented privacy and security dilemmas to all involved in online education. This paper invites online administrators, faculty, and students to go beyond the information-security protection afforded by higher-education IT departments and consider cyber hygiene as a personal responsibility—a mindset to be incorporated into one’s portfolio of preventative lifestyle habits in and out of the virtual classroom.

Definitions

- **Breach**: “any unauthorized disclosure, misuse, alteration, destruction, or other compromise of information, such as unauthorized access” (IFAP, 2018)
- **Cyber Hygiene**: practices Internet users need to follow to safeguard their devices and their personal information online (Miedema, 2018)
- **Phishing**: the use of untargeted email or attachments to trick users into allowing access to assets; a digital form of social engineering (NICCS, 2017)
- **Ransomware**: a type of cyber theft where software and/or data are blocked until the payment demanded by criminals is made (Tech Terms, 2018)
- **Risk**: the potential for an unwanted or adverse outcome; expectation of loss, usually evaluated as the threat x vulnerability x impact (Shirley, 2007)
- **Threat**: person, event, software or other item that has the potential to exploit a vulnerability and create an impact (NICCS, 2017)
- **Vulnerability**: a flaw or weakness in a system that could be exploited by a threat (Shirley, 2007)

Introduction

Since online higher-education enrollments continue to climb, four generations are overlapping in the workplace (ranging from digital immigrants to digital natives), and the technology undergirding online education continues to grow and transform, it becomes important for the online segment of distance education to focus on cyber hygiene. The practice of good cyber hygiene refers to adopting “a set of practices for managing the common and pervasive cybersecurity risks faced by organizations today” (Trevors & Wallen, 2017b, p. 3). Dr. Curtis Carver, former vice chancellor and CIO of the Board of Regents for the University Systems GA, noted that, if a nation state wishes to break into an education institution, it will (Zalaznick, 2013). According to the same source, Admiral Michael Mullen, the former director of the National Security Agency asserted that just about every major enterprise has already been hacked and there is a danger that dormant malware may have been left behind.

The Federal Student Aid office of the U.S. Department of Education notes that the higher-education sector has a low cyber-security maturity level combined with the high risk of owning different types of sensitive information; as a result, beginning with the fiscal year 2018, all post-secondary institutions participating in federal student-aid
programs will be subject to audits of student-security information (IFAP, 2018). Additionally, the Student Aid Internet Gateway Agreement requires that any suspected or detected university data breaches be reported on that same day via cpassaig@ed.gov (IFAP, 2018; SAIG, 2018). Failure to do so can result in fines of up to $54,789 per violation all the way up to loss of ability to participate in federal student-aid programs (IFAP, 2018).

The timing of these federal mandates corresponds with the overall recent thread landscape, which includes multi-billion-dollar digital bank thefts, disrupted presidential elections, and nation-state actors moving from espionage to sabotage (Symantec, 2017b). Many of these cyber security breaches were inflicted with basic technology tools and cloud computing (Symantec, 2017b). Cyber criminals are getting more and more ambitious as indicated by events such as the 2017 Equifax breach which impacted 145.5 million U.S. consumers (Equifax, 2018) or the 2018 hacking of some 300 computers at the Peon-Chang Olympic games (Nakashima, 2018). While increased awareness from the public may or may not have been able to prevent these massive hacks, it could certainly lessen the likelihood of many common cyber threats. Therefore, it seems appropriate for online education to have guidelines for cyber hygiene spanning from our personal computing devices to the online classroom.

Surprisingly, there is a relative vacuum in the research on cyber hygiene in online education. This article has practical implications for online education administrators seeking to ensure that their academic units progress from low to mid-levels of cyber security maturity, for online faculty weighing the pros and cons of requiring students to use software applications not supported by their institution, as well as to students looking to stay safe in the online realm.

**Cyber Threats**

The inception of computer-based education in the 1980s and of Internet-mediated education in the early 1990s brought access and convenience to those who needed to pursue their higher-education endeavors around the constraints of work and family (Kentor, 2015). These events are predated by cyber espionage occurrences as early as in 1968, when spies from the Soviet client state of East Germany were caught breaking into computers belonging to a West German subsidiary of IBM (Warner, 2012). Less than two decades later, in 1986, Soviet-sponsored clients were caught breaking into a series of government and university computers to steal information related to President Reagan’s strategic defense initiative known colloquially as Star Wars. This 1986 intrusion, which came to be called the Cuckoo’s Egg, was unique in that Russian-sponsored hackers facilitated their malicious work by utilizing computers owned by the University of Bremen, University of Pittsburg, University of Rochester, and the Massachusetts Institute of Technology, just to name a few (Stoll, 1989). By using university computers as command-and-control systems, the hackers believed they could obscure their tracks and minimize the chances they would be discovered while they pursued their real target. This attack using university computers is not singular; exploited computers at the University of Cincinnati were used to breach military systems at Wright Patterson Air Force Base, but were quickly expanded to include networks operated by Wright University and the University of South Carolina.

For both nation-state and criminal actors, university computers provide excellent proxies as they generally have very powerful networks and, when suspicious intrusions are noticed by system administrators, can seem more legitimate and therefore less likely to be scrutinized. Additionally, university networks have traditionally had less cybersecurity protection and hence are more vulnerable than networks in the private sector. In fact, the 1998 operation Moonlight Maze (in which the Russians attempted to obtain proprietary information on sensitive U.S. military technologies including designs for military hardware, weapons, and troop configurations) went undetected for months, partially as a result of Russian actors hopping through university computers to obfuscate their actions before intruding into sensitive systems of the federal government (Doman, 2016).

Beside using computer and networking equipment for command-and-control purposes, malicious actors might seek the following as valuable assets in higher-education institutions: administrative information critical to operations, education and training software, research laboratories, military and medical research data, confidential student and staff information, education-related websites, and, of course, money (Cordero, 2015; FireEye, n.d.; Fish, 2017; Matthews, 2016; Symantec, 2017a; U.S. Department of Education, 1998). Nation-states actors may also be motivated to target students in highly-technical STEM fields, especially students researching technology with military applications, to steal their research ideas or recruit them for subsequent employment.
These are not necessarily hypothetical examples. Cyber criminals are often after proprietary information they need for themselves or intend to sell to the highest bidder—whether a nation state or buyers on the digital back market. In some cases, they may go as far as destruction (Chalfant, 2017). According to a 2017 Computer World news analysis, a single Russian-speaking hacker breached twenty-four U.S. universities, including institutions such as Arizona State University, Cornell University, Purdue University, Virginia Tech, etc. (Storm, 2017). Penn State was hacked in 2015 resulting in the compromise of usernames and passwords; in this case, the FBI attributed the criminal activity to a nation state (Barron, 2015). In 2016, Michigan State University was hacked, resulting in the theft of the social security numbers, student ID numbers, and dates of birth of some 400,000 students and graduates (Matthews, 2016). American institutions are not the only targets of cybercrime. In 2016, the University of Calgary was hacked and the criminals asked for an approximately $15,000 ransom payment, which the university paid (Matthews, 2016). Oxford University, University College London, and Warwick University have all been targeted by countless and relentless cyber theft attempts, some successful, looking for sensitive data, such as military and medical research data (Fish, 2017). The potential impact of cybercrimes on higher-education institutions could amount to millions of dollars and damaged reputations (Zalaznick, 2013).

Cyber security concerns are so pervasive that two Senate and House bills were introduced in 2017 with the aim to encourage cyber hygiene. Senators Orrin Hatch (R-Utah) and Ed Markey (D-Mass.) introduced The Promoting Good Cyber Hygiene Act to direct the National Institute Standards and the Department of Homeland Security to study cyber threats and institute voluntary best practices with an annual revision cycle (Chalfant, 2017). Representatives Anna Eshoo (D-Calif.) and Susan Brooks (R-Ind.) introduced a parallel bill aimed to “establish best practices for cyber hygiene that will help Americans better protect themselves from enemies online” (Chalfant, 2017, para. 6). Not surprisingly, at CyCon U.S. 2017—the American-based international cyber-conflict conference held in Washington, DC in November 2017, numerous national and international pundits from the Army Cyber Institute at West Point and the NATO Cooperative Cyber Defence Center of Excellence (CCDCOE) emphasized the importance of cyber hygiene (Army Cyber Institute, 2017). A series of video recordings of the major conference talks is available at http://cyber.army.mil/Events/CyCON-US/.

**Cyber Hygiene**

If there is any doubt as to who is responsible for cyber security in higher education—and by extension in online education as well, “data security affects everyone at a postsecondary institution... and each person has a role in ensuring data security” (IFAP, 2018, para. 1). The biggest cyber security role resides with chief security officers, while information technology (IT) departments protect online administrators, faculty, and students through practices such as authentication, controlling access, as well as safeguarding data integrity and confidentiality (Defta, 2011). However, just because IT is there to enact security measures, it does not mean that everyone in the university ought to be passive (Trevors & Wallen, 2017a). Consider that although the police force keeps streets safe, citizens must still take personal safety precautions. For instance, leaving a front door unlocked or a window open might invite a theft, as would walking through crowded streets with a clear bag full of valuables. Similarly, having a computer password set to “password” or “123456” (which, surprisingly, are the top two most used passwords according to Password Random, 2018) or having a notebook that spells the user’s account for every web site and provides the exact username and password would create a vulnerability easily exploitable by a hacker.

The following recommendations, although not exhaustive, include ways for online administrators, faculty, and students to boost IT efforts and contribute to personal as well as institutional safety in the digital realm.

**Strong Passwords**

Passwords ought to be at least 10 characters long and include a mix of at least one number, lowercase and capital letters, and special characters (Defta, 2011; Nield, 2017). It is best to aim for hard-to-guess, seemingly random passwords (might consist of the first letter of a sentence that is only meaningful to the person who set it) and to opt for two-factor authentication whenever available (Nield, 2017; University of Oklahoma, 2018). Two-factor authentication involves adding a second layer of authentication, such as a code received by email or text message. This second layer makes it more difficult for a malicious user to gain access to an account. Passwords should be changed at least once a year and should also be set up on mobile devices. Besides setting strong passwords, it is important to have unique passwords for each account and to keep passwords secret (Trevors & Wallen, 2017a). A good option for achieving strength and secrecy can be using a password manager; many free and paid options are...
available as mobile or web apps. Lastly, it is best not to keep all passwords in writing on the same piece of paper as that document might get lost or be stolen.

**Anti-Virus Software**

While institution-provided computers most likely contain anti-virus protection, it is important for online administrators, faculty, and students to protect their personal desktop and/or mobile computing devices with anti-virus software. There are free and paid options that work across PC, Mac, Android, and Apple platforms. When choosing a robust antivirus software program, features to look for include email protection, automatic updates, as well as anti-phishing, anti-malware, anti-trojan, anti-ransom ware, anti-spyware, anti-worm, to name a few (Komen, 2017). Many times higher-education institutions sell discounted licenses to students and employees. Anti-virus software should be used to scan all attachments, files, and downloads prior to opening them. In an online learning environment, students will create documents and files that will be turned in to the instructor, or potentially shared with other students for collaboration on group projects. The sender's level of cyber hygiene cannot be assumed to be high, so any files received should be treated as potentially malicious when received.

**Update Software**

Work, school, and personal computers should stay up to date with the latest operating-system security patches and web browser updates. For personal computers, it is recommended to opt for automatic installs of any available patches. Additionally, computer users need to manually check for updates from third-party software applications such as Adobe or Java (University of Oklahoma, 2017).

**Free Software**

In an effort to reduce cost to students, some faculty elect to require the use of free versions of software applications. While many free software applications may be reputable and safe, some may have the potential to harm the user's computer or to cause a loss of privacy. Free software can harm the user's computer if the software is infected with a virus or other malicious program. Privacy can be lost if the free software contains spyware or keyloggers (Norton Security Online, 2018).

**Free or Public WiFi**

Free or public WiFi offers great convenience for connecting to high-speed networks, but does so at a very high risk. Free or public WiFi oftentimes is not protected by an authentication mechanism, such as a password, to prevent unauthorized users from connecting to the service. Once connected, a malicious user could eavesdrop on other users' WiFi traffic. Another method of eavesdropping on traffic is for a malicious user to set up a fake WiFi access point. When users connect to this access point, all of their traffic will go through the malicious user. If the user is sending any sensitive information, such as personal emails, banking information, FERPA data, or HIPAA data, a malicious eavesdropper would be able to see all of that sensitive information (Bencie, 2017).

**Least Privilege**

The concept of least privilege refers to limiting a user's access and authorization to only the amount needed to complete a task (Saltzer & Schroeder, 1975). Two broad categories of user accounts are used on most computer systems: an administrator user account and a standard user account. The administrative user account has unlimited access and authorization, while the standard user account has very limited access and authorization. Administrator privileges are required for tasks such as creating new user accounts, installing software, and modifying system files. Standard user accounts do not require authorization or access to accomplish those tasks.

Many users set up their home computer system with an initial administrator account and then use the same level of privilege daily. This habit opens the system to several vulnerabilities, mostly related to malware (i.e., malicious software) gaining access to the system. If the user is logged in as an administrator and starts a malware program, that malware program will receive administrator privileges. Starting a malware program could happen when a user clicks on a link in a phishing email, opens an attachment that has embedded malware, or installs a downloaded program that is infected with malware. A safer practice is to create a standard user account immediately after the initial setup.
for everyday use. Thus, if a standard user starts a malware program, the malware will only have standard user privileges.

**Thumb Drives**

The United States Computer Emergency Readiness Team recommends minimizing the use of thumb drives because they can be used to introduce malware into systems (US-CERT, 2011). Once malicious viruses are loaded on to a computer, they can be programmed to detect when additional thumb drives are being utilized and automatically download replicas of the virus for subsequent infection. The same is true for using smart phones which, essentially, can be thought of as a thumb drive with a user interface. As such, caution should be taken when attempting to charge smart phones in public USB ports.

The use of thumb drives to compromise systems is believed to be the reason the Department of Defense banned their use in 2008, in an operation known as Buckshot Yankee. In 2008, nation state actors are believed to have seeded multiple U.S. military forward operating bases in the Middle East with infected thumb drives. One of these thumb drives was inadvertently loaded into a U.S. military computer and resulted in serious disruption. Until 2008, this incident with malware-infected thumb drives, was considered the most significant breach of U.S. computer systems in history, and, in fact, initiated planning for the creation of U.S. Cyber Command.

**Incident Response Plans**

The Software Engineering Institute (SEI) at Carnegie Mellon University, whose primary mission is to “support the defense of the United States” (SEI, 2018) asserts that “cyber hygiene is a business problem, not an IT problem” (Trevors & Wallen, 2017a, para. 15). One of SEI’s recommendations is to establish an incident response plan (Trevors & Wallen, 2017a) so as to minimize damage as well as recovery costs and time (Drinkwater, 2017). This reinforces Dr. Carver's earlier warning that many higher-education institutions have been breached and any malware left behind might provide hackers a back door to conduct further malicious activities, which makes it paramount that higher-education institutions to have a robust plan for responding to cyber security incidents (Zalaznick, 2013). Online-education administrators should collaborate with their institution's IT and information security teams in formulating an incident response plan.

**Conclusion**

While the guidelines provided in this paper just scratch the surface of good cyber hygiene practice, they seem suitable given the U.S. Department of Education’s assessment that, overall, the American higher-education sector is in the infancy of cyber security maturity (IFAP, 2018). Additional cyber-hygiene practices could include using a virtual private network (VPN) connection to enhance secure communications (Sun, 2011), learning about the threat of social engineering (Puricelli, 2015), and becoming familiar with recognizing phishing (Biddle, 2017).

The International Cyber Policy Center at the Australian Strategic Policy Institute (ASPI, 2017) explored cyber maturity behaviors among study of 25 Asia-Pacific countries. Through this study, ASPI generated a three-tier classification: (a) limited or no public awareness of cyber issues, (b) some awareness, and (c) strong awareness. Although this study focused on nations, the combination of the ASPI classification and the guidelines presented in this paper might provide a way for online administrators, faculty, and students to start having conversations about cyber hygiene and eventually build up a culture of cyber security awareness.

To reach category (b) some awareness, online administrators and faculty might consider incorporating cyber-hygiene topics into freshman orientation courses using curriculum ideas from https://staysafeonline.org/ or creating a cyber hygiene module in new faculty orientations (or even annual compliance training) including ideas from https://ifap.ed.gov/announcements/Cyber.html and https://studentprivacy.ed.gov/audience/school-officials-post-secondary. To reach category (c) strong awareness, online-education leaders could ponder whether cyber hygiene is important enough to appear as an item or even as a category in instruments for measuring online-program quality such as the QM program certification rubric (Quality Matters, 2017) or the OLC quality scorecard for the administration of online programs (Online Learning Consortium (2018).

Cyber security could be metaphorically seen as a chain of which we are all links; the better prepared each one of us is, the stronger we are together. Senior cyber security engineers at the Carnegie Mellon University Software
Engineering Institute suggest that "a little hygiene goes a long way toward keeping your organization healthy" (Trevors & Wallen, 2017a, para. 6).

References


ASPI. (2017, December). Cyber maturity in the Asia-Pacific region. Retrieved from https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2017-12/ASPI%20Cyber%20Maturity%202017_AccPDF_FA_opt.pdf?hDv5_AxfVWgwCA_q8it1_H1wkH_HwZjb


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I-E-O Online: Understanding Today's Online Student at the University of West Florida

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Abstract

This study will survey undergraduate and graduate students who pursue higher education online and are enrolled at a public, regional comprehensive university. Students will self-report demographic information, academic and employment history, and learning preferences. The study results will provide a profile of students categorized by their self-identified inputs (e.g., female, married, 35 years old) aligned with preferred environmental factors that result in academic success, providing a detailed view of current online students and how their personal stories interact with learning environments with their success in mind.

Introduction

Undergraduate and graduate students who pursue higher education online and are enrolled at University of West Florida during the Fall 2017 and Spring 2018 will be surveyed. Students will self-report demographic information, academic and employment history, and learning preferences. A profile of students, categorized by their self-identified inputs (e.g., female, married, 35 years old) aligned with preferred environmental factors that result in success, will be generated. Success in this study is defined as a 3.00 grade point average or above in their online courses overall. Non-success is defined as a 2.0 grade point average or below in their online courses overall. An example of a possible student profile is female, 25-35-year-old, third year in program, high-SES, with ten plus years of work experience who prefers an asynchronous environment with learner-content interaction, low peer interaction, high faculty interaction, and low use of support services for a successful online experience. Through this research project, a detailed view of current online students and how their personal stories interact with learning environments with their success in mind will be presented.

This study is a duplication of a spring 2017 study conducted by Kuhn at Pennsylvania State University’s World Campus who found contradictions to current popular online education literature regarding student demographics and preferences.

Literature Review

As a regional comprehensive institution, the University of West Florida (UWF) has the mission of serving their community. For UWF to grow as an online institution, the student makeup, the capabilities, interests, and needs of the region must be explored. There have been research studies that evaluate motivation for enrolling in online education and the distance in which they are located from their institution. In 2012, Kolowich found that a majority of the surveyed students were seeking a degree (73%) and lived within 100 miles of the campus (80%) despite taking courses exclusively online. Conversely, in 2015 Learning House found that more than one-half (52%) of undergraduate students live less than 50 miles away from campus. Kuhn (2017), in her study of undergraduate Pennsylvania State University’s World Campus students, found that despite continually ranking as a top online education provider with a global brand, 50.37% of respondents resided in the state of Pennsylvania.

These researchers suggest that students are still interested in enrolling in their regional institutions even though there is the option to pursue education from anywhere in the world. Students are motivated to participate in online education for three primary reasons: 46% return to college to advance their career, while 29% hope to use their
degree to change jobs, and an additional 12% of online learners say they want to stay current in their fields (Groux, 2012). Learning House (2015) yielded similar results where 70 percent of undergraduate respondents identified meeting career goals was a primary motivation for enrolling in online education.

Online education in the public institution sector has had continual steady growth during the 2012-2015 time span of at least 200,000 students and has the largest population of students across sectors (Allen & Seaman, 2017). Florida institutions dominate the online education market with 18 percent of the top 50 institutions who have students taking at least one distance course in 2015 (Allen & Seaman, 2017). This growth and promotion of online education for public, Florida institutions is encouraging for an institution like UWF, suggesting the immediate local environment is open to and desires online education.

Kuhn (2017), in her study of World Campus undergraduate students found that there is a bigger and even more important story to be told outside of the research questions. The basic and descriptive analysis of the sample provided a larger view of the online student population of today. From these findings, a profile based on the most common responses of today’s online student can be developed across demographics, preferences, and outcomes. Today’s online student is female, in the age range of 25 to 39 years of age, an American student, white, non-military, not eligible for ADA, married with zero dependents and lives with a partner, family, and/or children. They have a GPA of 3.0 or higher and take at least 12 credits per semester while working full-time and at least 30 hours per week in the field they are not currently studying. They have a household income of $50,000 to $74,999 dollars per year and use a combination of debt (e.g., federal loans, private loans, grants) to pay for school. They also have previous college experience, with an average former GPA of at least a 3.0, and typically complete less than 30 credits at former institutions. They pursue education completely online and prefer to do so with zero credits completed residually. Students do not utilize tutoring, advisors, nor engage with faculty and prefer a lower level of interaction with both students and faculty in their studies. Students most prefer individual work, moving at their own pace, and deadlines; they least prefer group work, presentations, and papers as assignments.

Some of these findings were similar to those of Kolowich (2012) and Clinefelter and Aslanian (2014) which both found that the average online student is a Caucasian female in the same age range and working full-time. However, these findings align better with those of Kolowich (2012) who stated they are working full-time and have a household income of $65,000. Clinefelter and Aslanian (2014) found they also work full-time but with a household income of less than $40,000. Clinefelter and Aslanian (2015) also had findings much different than this study within the variables of marital status, employment status, and military classification. Clinefelter and Aslanian (2015) stated that many students did not have outside responsibilities including their work status as only employed full-time (44%), single (54%), veterans (5%), and active duty military (2%). This study has found a different result: online students here have many outside responsibilities including working full-time (55.59%) or at least 31 hours per week (72.14%), married, engaged, or in a committed relationship (65.26%), veterans (11.09%), and currently serving in the military (4.29%). These similarities and differences generalized representations of the online student. However, these data also suggests diversity among online students as well.

Bell and Federman (2013) stated that cost and SES are both barriers to online education. However, they found that there were equitable distributions of household income across the range of $0 to $150,000 dollars per year and is used as a proxy for a student’s SES. It could be that cost and SES status are preventing a higher number of those students from being represented in online education or higher education as a whole. However, from the view of this sample, lower SES is just as represented as those with a mid- or high-level SES. Particularly when evaluating the differences of those GPA groups of below 2.0 or above a 3.0 there was not much variation; those with a GPA below a 2.0 even had a greater percentage of representation in the $100,000 to $149,999 dollars per year range. The variable of household income did not have any significant relationships with outcome variables of either GPA or satisfaction, suggesting that SES may not be as big of a barrier as literature has previously suggested.

Even though these data provided the ability to construct a profile from the largest groupings of respondents, it is also worth noting the diversity of each variable from the study. Students span a wide range of characteristics, including age, region, marital status, hours worked per week, annual household income, financial aid status, former college completion credits, number of credits completed online, average credits taken per semester, and satisfaction of online learning. The wide range of responses in these categories provide for a diverse sample. However, even across these differences, a sizeable majority of online undergraduate students have similar preferences about interaction with tutors, advisors, faculty, other students, and assignment preferences. These findings show there is not just one
type of student pursuing online education at any one institution, and that many of their successes cannot be predicted by their inputs or environment.

The Study

This study takes its lead from the following five research questions:

1. What input characteristics are highly correlated with online students’ educational environments for a desired outcome of 3.0 GPA or higher?
2. What input characteristics are highly correlated with online students’ educational environments for an outcome of 2.1-2.9 GPA?
3. What input characteristics are highly correlated with online students’ educational environments for a negative outcome of a 2.0 GPA or lower?
4. How similar or different are online students based on environmental preferences regarding their input profile and levels of success?
5. To what extent is online students’ satisfaction with online courses highly correlated with their achievement?

Students will be obtained through enrollment reports for online programs at UWF at all levels during the 2017 to 2018 academic year. The survey developed in Qualtrics will be sent via University of West Florida official email to request student participation. The importance of this kind of research and it being the first of its kind will be stressed to students to encourage participation.

Students provide their age as part of their demographic self-report in the survey. Those who are not of age 18 will be disqualified from the study. Participants are able to withdraw from the study at any time and their data will be excluded. All other data contributed to the study will be used. There will be no follow-up with withdrawn participants.

After data collection is completed, it will be coded and cleaned (i.e., age grouped into categories). The data will be analyzed using basic statistical techniques such as mean, median, and range, and more advanced techniques including correlation and regression. The profiles will be developed through correlation and regression modeling. Statistical Analysis will be completed in the software packages, MiniTab and SPSS. Analysis seeks to find relationships on a few different levels. These levels consist of variables between inputs and environment, inputs and outcomes, environment and outcomes, and inputs, environment, and outcomes. If no significant relationship is found between any of the variables, data will be reported without significance and insight into the characteristics, preferences, and success of online students overall will still be achieved. Understanding these differences of demographics, motivation, and preferences allows for further analysis of online students and the extent to which particular environmental factors may influence their success.

Dissemination

The study is intended for online researchers, online program administrators, and online instructors. As there is little to no research on this topic in the online education field currently, any results may prove valuable as a foundation for all other researchers and those involved in the field. The UWF study is planned to be part of series of studies conducted on this topic and is the second study site. The study findings will be disseminated through conference proposals, journal submissions, and other possible media outlets that are interested in online education research (insidehighered, chronicle, etc.). The administrative leadership of the study site have an interest in the findings of the study and the ability to adapt, create, or revise current programming to meet student motivations and preferences. Outside of study site findings, the research as a whole seeks to build a strong foundation for student demographic data in relation to motivations, preferences, and success of online students.

References


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Towards a Common Data Set for Online Program Management

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Abstract

Administrators of distance learning courses and programs are faced with various data needs related to a range of issues; from enrollment tracking to faculty development to cost and revenue analysis. This paper will explore a proposed common data set for online program administrators and strategies for implementation. The framework offered for building a dataset necessary for online and distance education programing is built around three essential questions; how many, how much, and when?

Introduction

Online education has become an integral part of higher education in the US (Seaman & Seaman, 2017) and globally (Gaebel, et al., 2013; Mukherjee, 2018). The administration of online programs at institutions of higher education has grown into its own administrative area, with requisite needs for qualified staff, standards of practice, and data needs for intelligent decision making (Piña, 2008a; Piña, 2008b; Legon & Garrett, 2017). There is great variation across institutions in how data is collected and reported, and more specifically, little agreement as to what data is needed to effectively manage and direct online programs. This presentation and paper offer a framework for considering which data is needed, collected, and ultimately used in decision making processes for online and distance education programs.

Ask a Simple Question…

Soon after starting my current position as Director of Distance Education at USC Upstate in 2015, I was faced with a simple question by one of my colleagues; how many online courses did we have? I did not know the answer to that question of the moment, but more surprising was the difficulty in answering the question at all. Upstate is a mid-sized senior regional campus of the University of South Carolina system, with an enrollment of around 6,000 students. Several programs had moved to fully, or majority online status in years prior to my arrival with additional courses taught online or in blended modality across the campus. There was no enterprise level dashboard, and access to the student information system (SIS) and database was only given after a lengthy (and appropriate for security) “hunt and seek” exercise. Seeking out an answer to that question led me on a journey through data management systems, both internal and external to our institution, policies that were inconsistent and byzantine, and ultimately to the need to build a simple dashboard for data that would be 1) real-time and consistent, 2) easily understood, and 3) useful in answering the most basic questions for someone in my position.

A Quest in the Kingdom of Data

The administration of online distance learning, as it has developed now over two decades, requires data (Piña, A., et al, 2018). The use of data has been part of higher education management, in one form or another, for quite some time, tracking with the growth of a “culture of management” in both public and private commercial institutions (Keller, 1983). People in distance learning or online program administration are awash in services and suggestions for how, what, and when to infuse data into their experiences. We daily encounter discussions of “big data” and “data analytics” and trust that somehow all that is truly useful to our respective roles in Distance Education/Learning Online (DE/DL/OL) administration. But before a more thorough discussion of data- as used in distance learning- is presented, a brief review of what we mean by “data” is required to create a common understanding and starting point.
The fields of semiotics and informatics are most useful in helping define, in the most fundamental sense, what is meant by “data.” Data, according to a semiotic definition, are signs (or symbols) that represent something in a particular context. What that context is, and how we use that to derive meaning from the data, are critically important, perhaps more important than the data itself (Beynon-Davies, 2011). It is also good to differentiate data from information. This distinction is also critically important as we are awash in data, as it is being generated and streamed automatically through numerous systems, but our ability to derive meaning and information from the data in decision making lags the pure generation of data. Understanding data, and what it represents, in service of fostering greater efficiencies and improving the quality of what we do, is also terribly important. The goal of developing a relatively standard dashboard for DE/DL/OL administration is twofold; 1) identifying which data are appropriate and obtainable and 2) identifying which processes need data to inform continuously improving or continuously self-regulating systems.

The Inclusive Data Family

If we take the broader view of data outlined above, then we can look across a much wider landscape of signs and symbols than the basic (and more narrow) collection of numeric data typically understood to be the only universe in which we can play the game of management. Numeric data is indeed very important to our work. We have need to quantify just about everything that goes along with the distance learning administration territory, but the signs and symbols available to us along our path include much more than counts, averages, percentages, and statistical description or inference.

Qualitative methodology, while fully embraced across numerous fields, lags in the overall management culture in higher education (Paulson, 2016). Qualitative methodology is still seen to have less valid outcomes than purely quantitative methods (Noble & Smith, 2015). Although more examples of portfolio assessment (as one example), which promote the use of artificial evidence along with numeric data, are seen in assessment processes at large institutions, “data” is still largely thought of as synonymous with numbers. Data, however, as considered above, can be more broadly defined as the “signs and symbols” resulting from all our activities and processes through which we engage learners in that large social process of education. That suddenly paints a rather large and complex picture for us. Documents, media recordings (video and audio), live presentation and performance, artwork, 3D construction.

The following is a brief list of non-numeric types of data that can be utilized for planning, management, and evaluative purposes in distance learning administration (but rarely is):

- **Visual Image Data**: artifact evidence from online courses including screen capture (with personal ID information redacted or blurred), interviews, live video capture of presentations or student interactions (with appropriate ID security).
- **Audio Data**: podcast recording, audio notes, field/environmental recording, interviews.
- **Document Artifact Data**: forms, internal process documents, memos, reports.

Towards a Data Dashboard; Categories and Utilization

In the following list, I have paired the most basic data/information categories with one or more essential questions and a brief discussion of how and when this type of data may be used. Whatever the technology or organizational structure used, the categories below lend themselves directly to the primary tasks of the Online and Distance Education administrator.

**Enrollment Management** – *How many students do we have online?*

As I related at the beginning of this paper, the search for an answer to this particular question grew into a fuller exploration of data surrounding the need to understand past, current, and future processes of distance and online education at my institution.
Figure 1.
An Example of a Quickly Generated Data Table from a Spreadsheet, Auto-Reported from the System Database
(Data source: USC Upstate Information Technology & Data Services)

The data chart above offers a quick look at overall enrollment trends over a few years. The accompanying analysis of this particular example revealed that summer programs were largely under-enrolled for the 3 reported periods. Discussions related to this helped refine the strategy for online course offerings.

Course Management – How many courses are being run online? In which departments? How many in each program?

Getting an accurate count of how many courses are being run at the institution through the online environment can be more difficult than it might seem. Coding, or tagging of courses as online in the student information system can be confounded by inconsistent definitions of what “online” is, including “hybrid or blended” courses, including online courses in fully online programs only or combined with the whole population of courses using online modality during any particular semester or academic period.

Figure 2.
An Example of Course Count and Enrollment Data, Auto-Generated
(Data source: USC Upstate Information Technology & Data Services)
Faculty and Course Development – Who has been trained, at what level and how much compensation or recognition have they received and in what forms? Which faculty have received certification or external training?

Most DE/DL/OL programs involve training faculty to varying degrees (Thomas-Evans & Pomper, 2015). The DE/DL/OL administrator often is either responsible for training and support of online teaching faculty, or partners with other units on campus (learning/instructional technology support or centers for teaching excellence and faculty support). Whatever organizational structure, data related to training experience is critical to collect, organize and utilize in effectively managing costs, quality, and improvement (Purcell, Scott & Mixon-Brookshire, 2017). Faculty self-review and feedback on teaching processes as well as training or faculty development events, provide potential data for qualitative analysis.

Learner Analytics – What does student performance (across one or multiple courses) look like and what data is available that can impact teaching effectiveness? How do faculty and administrators effectively use data to improve student learning outcomes?

Of course we wish to know if our teaching, in general, is effective or not. This is a question that drives much of the assessment activity at an institution, but as many have noted, is often not pursued in an intelligent or coherent fashion (Seidel & Shavelson, 2007). Even so, student activity, while matriculating the various curricula we have set before them, leaves behind loads of data in the form of grade transcripts, engagement data, and more. Learner analytics, a current focus of the various commercial services vendors (they prefer the term “partners,” which is dubious), can be thought of as both a process of data collection and consumption at the local level in each individual course, or at a larger level where student performance data is collected and understood in the context of the whole institution. Engagement data, particular in the form of “breadcrumbs” when students click, view, touch or otherwise engage elements in online courses, is one source of data to be collected and analyzed. Strang (2017) notes the problems that some have had with using “big data” (gathered across multiple institutions or regions) to effectively impact decisions about teaching.

In his mixed methods study, he further notes that learner analytics, coupling traditional quantitative data with qualitative data can yield significant measures of effective course elements. Much of the research and discussion of data analytics and even “dashboards”, as related to DE/DL programs, centers around the role of data analytics applied to learning, or learner analytics (LA) (Roberts, Howell & Seaman, 2017). Faculty and academic leadership have a central interest in this data and its reporting. Sensitivity to the evaluative nature of student performance needs to be a caution, as it is easy to misconstrue academic performance data and faculty teaching effectiveness, although some would argue that is the point of learner analytics, at least when used in an operational sense. Learner analytics, while useful for overall program management and for some evaluation processes, are best utilized in reference to providing direct input in student learning through faculty student communication (Millecamp et al., 2018).

The Technology of Data Collection and Analysis: A Proposed Dashboard

The review of data types and purposes above suggests a proposed design for a dashboard model. A dashboard, in a simple explanation, is a visual data tool which facilitates the collection, display and interpretation of data for creating information. The term “dashboard” derives from and directly relates to the display features of a typical automobile, where the dashboard is arranged for primary view of the driver, takes input from multiple sources of data streams (electro-mechanical sensors distributed throughout the vehicle), and displays real-time date in symbolic form. These symbolic representations can be in the form of needles on a dial, digital numeric display, color coded lights, audible indicators, etc. They are all designed to collect data, display it in easy to interpret ways to provide meaningful information to the driver who uses that information to operate and control the system.

“Data dashboards” likewise have evolved to collect and display various types of data in ways that help inform users in the system.

For our purposes, a data dashboard that collects and displays information for critical purposes in DE/DL/OL administration would have, at the minimum, the following features (by major category and sub-category):

- Live enrollment data for online courses
  - Enrollment trends across time
  - Online course enrollments grouped by program or department
• Online course counts
  o By academic term
  o By academic program

• Course and faculty development activity
  o Courses under development
  o Faculty lists with training levels, awards

• Learner analytics and performance
  o Grade comparisons, OL and non-OL courses and programs
  o Assessment performance indicators by program or academic unit
  o Graduation, retention, and completion rates

Like most processes in higher education, a variety of small to large companies have technology products and solutions to assist building custom dashboards. However, commonly available office productivity tools, such as Microsoft Excel™, offer very powerful tools to turn sheets and tables of data into forms and charts, which can be organized to display a dashboard of the data listed above. Software programs like QSR NVivo™, which help organize qualitative data for analysis and interpretation, also provide tools to visually display the data patterns and interpretations and can be integrated into a dashboard display.

Understanding Our Data Reality – Knowledge management and data-driven decisions

What we use data for is equally as important as identifying what it is and where it exists. Obviously a key recommendation here is to not focus on the simple (or complex) collection of data without considering how it will be analyzed, interpreted and ultimately utilized in making improvements to individual courses and entire programs. Once the sources of data are clearly defined, a regular program of generating reports, planning and discussion exercises and sharing of the data with key stakeholders is an important part of the cycle. Raw data often has little meaning (or different, sometimes divergent meaning) to different end-users. Business and finance office staff might look at it one way, enrollment management staff will have different needs and interpretations, and academic administration will want to see still other groupings and analysis. Still, sharing basic data, captured through a dashboard and reported clearly, to a diverse audience can yield multiple and often rich interpretations, leading to equally rich analysis and suggestions for continuous improvement.

References


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Leading by Innovating Higher Education: LMS Change Management Strategies Designed to Mitigate Student Attrition During a Large-Scale Blackboard Ultra Implementation

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Abstract

Technology-driven education is rapidly changing. To keep up with this environment, institutions implement new learning management systems (LMS). A poorly executed LMS implementation can negatively impact the student experience. This paper includes findings of a study conducted to better understand ways to mitigate student attrition during LMS migrations. After an exhaustive search of the peer-reviewed literature, seminal professional white papers and other documents, along with interviews with similar institutions and vendors, three primary recommendations emerged. First, university leadership should consider a staged migration to ensure that the first phase of implementation is executed as flawlessly as possible. Second, a multi-faceted communication strategy should be implemented with the purpose of generating university-wide excitement and buy-in, and third, the institution should use the transition to the new LMS to improve curriculum. Recommendations for future research include expanding this study across multiple institutions.

Introduction

The purpose of this study was to address risk mitigation of student attrition during the implementation of the Blackboard (Bb) learning management system (LMS). Presented is a conceptual model with integration of several theories for practical application to create meaningful leadership and learning encounters with students and faculty. Transformational leadership is required to inspire, engage, and empower these encounters with the Bb LMS to create and spread positive perceptions of user acceptance throughout the organization. This study included findings from the current literature and insights from various LMS vendors and institutions similar to the compared university who recently implemented large scale LMS migrations. The focus of this paper is on best practices and other strategies that attend to mitigating student attrition during the LMS change management process.

Change Management Context

As a technology driven higher education institution, university leadership made the decision to move away from a proprietary learning management system. To remain competitive the university requires a current LMS, which Bb provides. The overarching objective of this inquiry was to understand what is known relative to how to manage a large scale LMS transition with a focus on mitigating student attrition.

Hence, this study was focused on two guiding questions:

1. How should the Bb LMS be implemented to mitigate student attrition?
2. What constitutes a meaningful leadership and learning encounter in the context of mitigating student attrition when implementing the Bb LMS?

To inform these guiding principles, the authors of this inquiry relied on two sources of knowledge procurement, we: (a) conducted an exhaustive literature review including non-peer reviewed professional documents available from seminal sources in the field, such as Educause and the Online Learning Consortium; and (b) interviewed similar institutions that recently implemented a large scale LMS and LMS vendors who have worked with large institutions.

**Literature Review**

The literature review consists of perspectives in theory and practice to present a realistic approach to mitigate student attrition during implementation of the Bb LMS. Theories include transformational leadership, change management, cognitive psychology (specific to rational and emotional dimensions), and technology adoption and diffusion. Practical applications of these theories include alignment of the Bb LMS implementation to the organizational change process.

The dynamic nature of mobile LMS transformational change such as the one with Bb requires a multiple theoretical perspective, as one theory is not sufficient to mitigate risks of student attrition. For example, while the ADKAR change model provides benefit in addressing individual needs such as awareness, desires, etc., and emphasizes the self-focus of What’s In It For Me (WIIFM), it does not explicitly address the leadership imperative transforming an organization effectively through the change process in an efficient manner by navigating through ambiguity and emotionality. Therefore, a synthesis of several theories is recommended for mitigating risks of student attrition for Bb implementation.

Theory and practice are integrated to present a pragmatic theoretical model to explain conceptually how the Bb LMS should be implemented to mitigate student attrition and to explain what constitutes a meaningful leadership and learning encounter at the student level. The premise for creating meaningful leadership and learning encounters is the synthesis of all the theories cited in this literature review to provide a new perspective for balancing the indispensable relationship between leadership and learning.

**Transformational Leadership Raises Inspiration of Followers**

The transformational leadership style (Bass & Avolio, 1997) has been shown to strengthen follower commitment because it inspires inner motivations, which can be channeled towards achieving the organization’s mission and purpose (Sarros, Cooper, & Santora, 2008). The theory of transformational leadership best explains how effective leadership behaviors within an organization can inspire, engage, and empower superior performance from followers when individual needs, abilities, and aspirations are considered. Transformational leadership is like the rising of the sun; shining light with new perspective for followers to see change as possible via positivity and transparency in the process (Norman, Avolio, & Luthans, 2010).

**Kotter’s Change Management Model Integrates Transformational Leadership**

Kotter’s change management model informs the process of organizational change through eight steps by integrating transformational leadership with logic and empathy (Kotter, 1996; Kotter & Cohen, 2002). The first group of steps is about creating the climate for change: (a) Create a sense of urgency, (b) Build guiding teams, and (c) Make sure the vision is right. These first three steps need transformational leadership to initiate the process and propel progress through the remaining steps to gain and sustain momentum. The second group of steps is about engaging and enabling change: (d) Communication for buy-in, (e) Enable action and (f) Create short-term wins. The last group of steps is geared towards implementing and sustaining change: (g) Don’t let up – be persistent and (h) Make it stick.

Advantages in applying Kotter’s eight-step model include concise and logical process steps for managing and sustaining change within an organization and with a focus on behavioral aspects and emotional implications. However, when implementing Kotter’s model to engage faculty during an AACSB accreditation process, Calegari, M. F., Sibley, R. E., and Turner, M. E. (2015) found it necessary to repeat prior stages before proceeding to the next step in the process; especially when short-term wins were achieved, “faculty sometimes felt that these were sufficient and that efforts could then be suspended” (p. 41). To mitigate risks of lost momentum, leadership teams would repeat communications as reminders about the vision, why the change was needed, and provide
empowerment opportunities for faculty to create more short-term wins – for consistent and persistent ongoing change management activities to sustain momentum. In addition, Calegari et al. (2015) found Kotter’s model to be lacking in transition of top-down communication and two-way communication at different levels within the organization. To rectify this communication gap, emphasis was placed on making the process transparent to gain faculty buy-in and persuade why the change was right at the individual level.

In comparison to Zenab Kazmi, S., and Naarananoja, M. (2013), “the main criticism of the Kotter change model was that he, throughout his dissemination activities relating to the model, avoided any discussion highlighting how this high level approach ties into project management” (p. 221). The literature review indicates a need for both the linear process of the eight steps and a recycling through the eight steps to apply both top-down and cross-level communication to reinforce short-term wins and sustain momentum according to the project management plan. Here is where Kotter’s model should be integrated with ADKAR to meet the specific needs of both the organization and the individual.

ADKAR Connects Organizational Change to the Individual Level

ADKAR connects the change process to individual needs and expectations and is similar in principle to Kotter’s eight steps for effective change management. The model’s name is based on each alphabet’s stage of the change process (Zenab et al., 2013; Hiatt, 2006). The A is for awareness; to make employees aware of the need for change. The D is for desire; to create an individual desire for the change by addressing the What’s In It For Me? The K is for knowledge; making sure employees have the knowledge to make change happen. The A is for ability; to enhance and promote development of employees’ ability. The R is for reinforcement; to reinforce the change for sustainment.

ADKAR places the focus at the individual level (Hiatt, 2007) and provides opportunity to leverage change activities when integrated with top-down and cross-level communications via transformational leadership to influence change when students experience a meaningful learning encounter through the Bb LMS. However, although the ADKAR model is designed to recognize barrier points at each interval stage (such as not knowing what to do and therefore relying on constant help from faculty), ADKAR does not effectively address the gaps between each stage of an individual’s development progress through innovation and performance excellence (Zenab et al., 2013). Therefore, ADKAR needs transformational leadership (Bass & Avolio, 1997) to inspire, engage, and empower students to think innovatively as self-directed learners. This transformational leadership connection between the Kotter and ADKAR models creates a symbiotic relationship to support cognitive and emotional psychological dimensions for effective behavioral-coping skills (Epstein, 2014; 1998).

Cognitive-Emotional Theory (CET) Informs Understanding of Logic and Emotion

Cognitive-Emotional Theory (CET) helps to explain how the individual cognitive framework is organized to recognize the logical and emotional triggers of stress in decision-making (Epstein, 1998). Where ADKAR does not effectively address the gaps between each stage of an individual’s development progress through innovation and performance excellence (Zenab et al., 2013), CET can be useful to identify barriers for overcoming ADKAR gaps by including relevant resources and tools to facilitate problem-solving with minimal stress (Epstein, 1998). In other words, empower students to reframe their perspective from a barrier situation (e.g., not knowing how to do something in the Bb LMS) to a positive coping behavior that finds solutions rather than avoidance – to create a meaningful leadership and learning encounter.

Andragogy Considers Student Readiness to Learn

An effective way to promote positive coping behaviors is to apply the theory of adult learning – Andragogy (Knowles, 1984). Andragogy takes into consideration the readiness of a student’s orientation to learning for effective use in the Bb LMS application to create a meaningful leadership and learning encounter. Improve student readiness to learn Bb by creating social learning opportunities to share knowledge. Include Champions of Change as part of the Kotter’s Step 2 for establishing guiding teams. Champions of Change can be students and/or faculty who share knowledge and promote positive perspectives about using the Bb LMS, which can help overcome ADKAR gaps of where barriers exist between the individual stages and create a meaningful leadership and learning encounter.

Social Cognition Theory (SCT) Explains Perceptions within Social Learning Environments
Social Cognition Theory (Bandura, 2001) explains the influencing power of individual perceptions within a social learning environment to integrate with technology acceptance and diffusion theories (Rogers, 2003). According to Joo, Kim, and Kim (2016), when online Korean university students \((n = 222)\) perceived usefulness and experienced satisfaction with the mobile LMS, the intent to continue using the system increased and this “continuance intention predicted actual usage of m-LMS” (p. 611). The integrated relationships between the ADKAR stages, where barriers/gaps can form (Zenab et al., 2013), include “perceived ease of use, perceived usefulness, expectation-confirmation, satisfaction, continuance intention and actual usage of m-LMS” (Joo et al., 2016). Thus, to mitigate risks of student attrition as a result of these barrier/gaps, UOPX leadership should focus on creating meaningful leadership and learning encounters via the Bb LMS with students and faculty. Doing so will promote positive perceptions of user acceptance.

**Technology Diffusion Theory Spreads Perceptions of Success within the Organization**

Technology diffusion theory (Rogers, 1962; 2003) helps to explain how individual perceptions of personal success, as related to the meaningful leadership and learning encounters with the Bb LMS, can spread acceptance throughout the organization.

As cited in Atkin, Hunt, and Lin (2015):

According to Rogers (2003), innovations are defined by five important characteristics: relative advantage, compatibility, complexity, trialability, and observability. The notion that an innovation is better than its predecessor is considered a relative advantage. When an innovation is consistent with needs, values, and experiences of the adopter, this characteristic is known as compatibility. The complexity characteristic addresses the level of difficulty for using an innovation. The trialability characteristic describes the limited basis in which a potential adopter can experiment with an innovation. The observability characteristic involves the degree to which the results of adopting an innovation can be seen by others (p. 626).

Collecting user login data such as frequency and duration will provide quantitative data for analysis of student usage (Joo et al., 2016) of the Bb LMS. Joo, et al. (2016) recommended comparing and contrasting usage of diverse student populations and investigating hidden factors related to continuance intention, such as social interactions (Bandura, 2001) and effects of internal marketing of the Bb system – all of which can help mitigate student attrition and create meaningful leadership and learning encounters.

**Mitigate Risks of Student Attrition**

To mitigate risk of student attrition during the Bb LMS implementation, application of the conceptual model shown in Figure 1.0 should be used as an integrated approach for creating transformation change within the organization to achieve the following institutional performance outcomes:

- Effective implementation of change management strategies for faculty and students
- Bb training for faculty and students
- Support opportunities for ongoing training & development for Bb Ultra
- Student engagement & expectations – communicating with students, training needs
- Grading and feedback

**IT Specific to the Bb LMS**

The practical implications of systems technology and infrastructure include the following recommendations to support the above institutional performance outcomes:

- Provide students with tips on how to maximize wireless bandwidth and coverage in informal learning spaces (home, vehicle, athletic clubs, cafés, etc.).
- Evaluate the usage of technical support services to identify opportunities for reducing ticket turnaround times, providing faculty and students with relevant do-it-yourself examples, and making technical support services more visible/available.
Promote awareness about cybersecurity to improve the Bb experience with effective and efficient practices (e.g. two-factor authentication, revised password protocols, etc.).

Aligning Bb LMS to Figure 1.0

The EDUCAUSE Center for Analysis and Research (2017; 2014) provided several practical applications that align to the conceptual model shown in Figure 1.0:

- Institutions reported improvement in student attrition, which was temporary at first, and attributed this improvement to the opportunity to be part of a new initiative. “It’s like driving a new car.” However, it is very important that the migration be successful and thoughtfully iterated or piloted to ensure that the student experience is positive. A negative student experience can create increased attrition. Therefore, create short-term wins and recycle through the Kotter steps to connect with ADKAR stages at individual levels to create meaningful leadership and learning encounters with the Bb LMS.
- Institutions with successful implementation reported that using an external project manager with a specialty in LMS migration was essential because this person could not only keep the project on track, but also identify potential risks and be unbiased (without affiliation to the institution or vendor) in their assessment.
- A thoughtful, multi-phased pilot is critical. It is better to be slow and iterative and catch and fix issues prior to a full launch. This diligence is particularly important as it related to ensuring that navigation issues are solved prior to launch. Verifying system performance issues is more likely to facilitate a better student experience and not only mitigate attrition, but potentially create attrition improvement via meaningful leadership and learning encounters with the Bb LMS.
- A well-executed and comprehensive communication plan is vital. Start early and communicate often in as many ways as possible. Create excitement and make sure people are ready on Day One as to what the Bb LMS will do (facilitate and improve learning) and how they interact with the LMS (log-in) etc. Internally market this new experience to build support and momentum, which takes time – patience, persistence, and positive reframing of perspectives.
- Consider a two-phase migration. The first phase includes the basic functionality, look and feel, etc. and the second phase includes bells and whistles such as video, etc. Be clear about these phases. The rationale is that it is better to be successful with fewer functions than run the risk of a longer list of functions going wrong.
- Take an opportunity to make real and meaningful differences in the curriculum so it is not simply a transfer of one curriculum to a new platform. How can you incorporate micro-learning, adaptive technology, etc.? Something should be new besides the LMS.

Insights from the Field

To support the literature review we conducted confidential interviews with academic and operational leaders from two large private for-profit institutions, each with enrollments over 60,000 students who recently implemented large LMS implementations. We also interviewed two different LMS vendors involved with these implementations and have also worked with a wide range of institutions.

Notably, while the other vendors were not directly affiliated with Bb, the institutions and vendors we spoke with consistently offered the following insights:

1. Aside from the information we uncovered in the most recent literature, there is very little known about how to mitigate student attrition during and after a large scale LMS migration. Thus, institutions have to create a plan that meets their unique needs. In general, we have found that vendors were of little assistance when it came to offering advice.
2. Similar to the Educause report mentioned previously, institutions we spoke with also reported improvement in student attrition, but it tended to be temporary and difficult to know whether it could be attributed to the LMS migration or other retention initiatives.
3. Institutions with successful implementations also mentioned the importance of excellent project management and a well-conceived and executed communication strategy. These respondents talked about “selling” the new LMS and what this platform will do for faculty and students.
4. Respondents discussed a multiphase pilot and spoke of executing a few things well rather than everything at once to avoid execution issues early on. Creating issues early on is the best way to increase attrition risk. This point was reiterated through multiple interviews.

5. Finally, it was reinforced that it is important to take an opportunity to make real and meaningful differences in the curriculum, so it is not simply a transfer of one curriculum to a new platform.

Summary

This study was conducted to provide insights to leaders and other key stakeholders regarding how a large-scale LMS implementation may be executed in a way so that student attrition is mitigated. After an exhaustive search of the peer reviewed literature, seminal professional white papers and other documents, along with interviews with similar institutions and vendors who informed the white paper’s guiding principles, there are three primary recommendations. First, university leadership should consider a staged migration to ensure that the first phase of implementation is executed as flawlessly as possible. While all migrations have issues, keeping the first migration as simple as possible will reduce the risk of something going wrong. Second, a multi-faceted communication strategy should be implemented with the purpose of generating university-wide excitement and buy-in. Third, use the transition to the new LMS as a way to improve curriculum. These change management processes can facilitate a “reboot” for the overall academic experience. This type of change will not only help mitigate attrition, but may also facilitate clearer academic differentiation. Following these steps will also optimize the ongoing delivery of educational content and will ultimately increase user satisfaction and loyalty.

References


EDUCAUSE. (2017). ECAR study of undergraduate students and information technology. EDUCAUSE Center for Analysis and Research.

EDUCAUSE. (2014). The current ecosystem of learning management systems in higher education: Students, Faculty, and IT perceptions. EDUCAUSE Center for Analysis and Research.


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Creating Online Community: 
Tools promoting Choice, Voice and Connectivity

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Abstract

This paper presents a rationale for and process of creating online community, particularly among professional scholars and graduate students. Referencing the case of longer-term scholar-mentee communities, free online resources used to engage students in creating community by offering choice, promoting synchronous gatherings and facilitating dialogue (soliciting preferences/availability, scheduling/conducting online meetings and distributing responsibility).

Introduction

Learning is enhanced through collaboration and dialogue (Millis & Cottell, 1998) and this is true for learners at all levels and particularly helpful to remember for learners who continue into advanced scholarly studies and professional efforts where their specialized interests can lead to deep focus and potential isolation. The complex professional and personal lives of adult learners often lead them to online learning environments (McGivney, 2004), with this experience frequently leading them to feel isolated and alone (Rovai, 2007). Social learning theories originating with Vygotsky (1978) and Bandura (1986) are often noted when considering effective learning strategies. Social cognitive theory (Bandura, 1986) has been tied to critical learning and proposed as a mechanism for addressing isolation and alienization experienced in online environments (Gunawardena & Zittle, 1997; Rovai, 2007). Further supporting this, a recent meta-research study on social presence confirmed that the ability to perceive others in an online environment has been shown to impact student motivation and participation, actual and perceived learning, course and instructor satisfaction, and retention in online courses (Richardson, Maeda, Lv, & Caskurlu, 2017). Research additionally supports the idea that social interaction encourages learner engagement in critical thinking and higher-level learning (Garrison & Akyol, 2013).

In the higher education setting, educational developers have long embraced community and collaboration as critical tools for fostering effective teaching and significant learning (Chickering & Gamson, 1987; Millis & Cottell, 1998, Fink, 2003). Action and reflection are recognized as central to learning, both for students and faculty (Dewey, 1933; Kolb, 1984; Bransford et al, 2000). Faculty in higher education can also experience isolation and find connection through communities of practice (CoP). Often referred to as Faculty Learning Communities (FLCs) these structures bring faculty together to explore interests, share ideas and enhance teaching professionalism and inquiry and offer a powerful mechanism for fostering the thoughtful sharing of ideas and innovations (Cox, 2006; Cox, 2003; Mullinix, 2006).

Forming, facilitating and sustaining communities, whether designed for in person communities or those fully online, takes time and effort. Expending such effort is worthwhile as explicit and direct support for doctoral students that increases communication and connection with mentor-committee members has been shown to positively impact persistent and retention (Ames, Berman, & Casteel, 2018). Further, in the online environment instructor-facilitated courses and longer courses were also associated with a stronger sense of community (Demmans Epp, Phirangee, & Hewitt, 2017). Building community involves strategies for gathering and scheduling, collaborating and collecting and sharing information. As time is the one resource that is often in shortest supply, the ability to make use of online tools to facilitate this process helps to increase efficiencies. Fortunately, the range of online tools available to facilitate these tasks have mushroomed in recent years, with many being free and low-cost making them accessible to all (TLTGroup Diigo Repository, http://tlt.gs/diigo).

The Case Context: To illustrate the process of online community creation and continuation this description references the case of a community of doctoral students spanning multiple time zones, with disparate interests and
backgrounds at various stages in their PhD Education studies. The core of the community experience resides in a Learning Management System (LMS) that doctoral candidates are enrolled in together during their dissertation development and research. In this case, the number of student mentees ranged from six to twelve and the base for the community was constructed around the standard asynchronous requirements built into the course involving announcement-emails, two discussions posted during the fifth and ninth weeks of the 11-week quarter with topics identified by the facilitating instructor-mentor. The other interactions in the LMS involved mentor-mentee/instructor-student interactions around Quarter Plans (learning contracts), Final Reports and submissions of dissertation-building documents for review and feedback. Individual mentees may spend anywhere from two to four years or more in a Research Forum course community.

**The Case Context**

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**Extending the Community**

After the first year we started to explore options beyond these standard elements to add depth and increased community connections. As communities are best built together, the design and decisions were fostered and filtered through the core group of early mentees. The process proceeded in the following order and utilized the following strategies and tools.

*Soliciting Preferences and Availability [Tricider]*

While agreeing to the idea of exploring synchronous meetings was achieved in regular LMS discussions, the detailed decisions regarding which virtual meeting platform to utilize and when we could all meet, given the complex schedules of professional working adults, required a collaborative decision-making tool. Tricider (www.tricider.com) was identified and used. This social voting tool allows participants to add ideas, discuss pros and cons, and vote on proposed ideas to prioritize them and links can be shared with specific individuals or embedded in blogs, websites, LMSs or posted to Facebook or Twitter. In our case, we identified several days and times that would work for everyone and determined levels of access, comfort and familiarity with various video meeting platforms.

*Scheduling Meetings [Doodle & Google calendar events/invitations]*

Once we had a general idea of shared days and times to meet, we needed to find specific dates and help everyone schedule their time. For this, we used Doodle (www.doodle.com), a scheduling and opinion pooling tool that allows for individuals to indicate all dates and times that would work for meetings with invitations taking the form of simple links. All contributors can see the choices made by others, encouraging the possibilities of natural emergent consensus. Deadlines can be set and final choices can be shown, the rationale clearly indicated through the choices made by contributors to the poll. Once set, shared calendar programs (such as Google Calendar or Outlook) can be used to send invitations with inbuilt reminders to ensure that everyone can easily plan for agreed participation.
Regular communications are definitely required to keep the community on track and make sure that all the members are able to participate. Announcements in LMSs that can be pushed out via email are very helpful as communications get out to mentees in a timely fashion and remain inside the course structure for easy reference and contextualized reference. Whether sending links for the early decisions and scheduling, alerting participants to upcoming events and meetings, soliciting volunteers to take responsibility for upcoming discussion sessions, or informing everyone when recordings have been posted. Email is also critical for facilitating communications with individual community members who agree to take on co-facilitation responsibilities.

The focus of the meetings is intended to be scholarly topics and skill building. Community is strongest when participation is robust and responsibility is distributed. As such, our approach has been to align online meetings with the beginning of the quarter and the two original required asynchronous discussions that are built into the Research Forum course (weeks 5 and 9 of the 11 week course). While we started with a single synchronous meeting per quarter, the response was so positive that we soon moved to increase this to a monthly meeting. With availability responses from Tricider and 11 week quarters, this translated to a “First Mondays Online Meeting” (that generally, but not always fell on the first Monday of each month), allowing regular scheduling patterns to facilitate planning. This extended meeting practice also meant that across four quarters there were a lot of meetings to plan and facilitate. Mentees agreed to take over increased responsibility for helping to identify discussion topics and co-facilitate asynchronous text discussions and associated synchronous video meetings. As the mentor took on responsibility for most initial meetings to get the quarter rolling, this left eight meetings per year to be distributed among volunteer participants. Discussions occurred using the standard LMS threaded discussion tool and announcements/emails both solicited and thanked volunteer facilitators. Individual email was used to select topics, craft discussion prompts, draft agendas, propose PowerPoints and plan for online meeting facilitation as were shared files/documents (via Google Drive and One Drive). Needless to say, this increased and distributed responsibility enhanced the feelings of ownership and connection experienced by community participants.

A plethora of free online meeting tools not only exist, but have been broadly used for several years. Many of these platforms allow for video and/or audio interactions with multiple participants and also incorporate chat, screen-sharing and whiteboard features. The differences worthy of attention surround the requirements for participants to easily join the meetings. Several require participants to established accounts in order to participate and the host to initiate direct invitations and calls to the meeting with individuals and/or groups (Skype (www.skype.com) and Google Hangouts (https://hangouts.google.com/)). The easiest are those that individuals can join with only a link or room number (Zoom (www.zoom.com)). Skype and Hangouts can accommodate up to 25 individuals in the free video conferencing space while Zoom has expanded to accommodate up to 50. In this case we tried all three of these tools, beginning with Skype, exploring briefly with Google Hangouts and settling in on Zoom. Other than the 40 minute limit for Zoom meetings, sometimes a gift and other times a limitation, the ease of access, transparency of use, and general quality and reliability of Zoom has made it the preferred tool for our community. While there are now more tools worthy of exploration (or not) and plenty of comparative assessments online (just Google this vs. that), the additional ones that are floating to the top are: Appear In (www.appear.in) and Join.me (www.join.me) but currently fall farther down on my list as they only accommodate 8 and 10 participants respectively in their free versions which are insufficient for the size of our community.

The ability to both record and post video recordings in secure location for viewing and reviewing is important. The larger the group, the more likely that synchronous meetings will be missed by one or more community members. Indeed, online meetings, especially where not a standard requirement, should be optional as participants choosing
online communities have complex and busy lives that may not always accommodate even regular meeting times. While mentor-facilitators should not require attendance, they can encourage participants to join in or to send a notification when they are unable to attend. Mentors hosting video meetings have control over recording and recordings. An LMS offers a ready-made location for posting these meeting recordings. Creating a discussion repository space, uploading video recordings and sending announcement-emails to students once recordings are posted is time consuming, but worthwhile to maintain the community. In this case, this was certainly found to be true.

Recently our LMS (Blackboard) activated an updated internal video conferencing tool: Collaborate Ultra. As mentor-instructor responsible for hosting and leading our web-based meetings, I was looking forward to an embedded video conferencing tool that would minimize the time I spent uploading and posting video for mentees/students to view/view. So, for the third time, we shifted to a new tool, anticipating that this one could eliminate the time needed to upload and link to the video recordings. While the audio and video quality was good and screen-sharing and general room layout was intuitive, there were some barriers encountered. It was still not quite as easy for participants to join the room and most importantly, the video experience was not as community-focused. Students missed Zoom’s view showing everyone’s video at once, as Collaborate Ultra showed a single row maximum of 5 videos, images or icons and then shows a + # participants below, without even listing participant names. Having spent nearly three years using Zoom, this made the experience sufficiently unsatisfying that we reverted to Zoom as the familiar and preferred tool for our community.

Final Thoughts

Building community requires planning, strategy and persistence, particularly in online environments. Utilizing base tools available through an LMS is a good start, but the availability of free and low-cost online tools can help to extend this experience. Asynchronous social polling, decision-making, scheduling and planning tools coupled with synchronous video conferencing platforms can bring a community to life. Hopefully the case example shared effectively illustrates the flow and interconnection between such tools and provides a vision for how to leverage these tools to enhance scholarly communities in online and blended contexts. Community connections for a group of otherwise isolated and geographically dispersed participants can serve to inspire and motivate individuals to continue their scholarly journeys. Actively engaging participant-learners in creating community by offering choice, encouraging voice, promoting connection through synchronous gatherings and focused scholarly dialogue will build strong communities. Empowering participant-learners to contribute to decisions and the design of the community and to take on facilitation responsibilities and periodic leadership roles will broaden ownership and create sustainable, long-term communities.

References


Cox, M. D. (2003). Proven faculty development tools that foster the scholarship of teaching in faculty learning communities. To Improve the Academy, 21, 109-142.


Mullinix, B. B. (2006). Building it for them: Faculty-centered program development and e-management, in S. Chadwick-Blossey & D. Robertson (Eds.) To Improve the Academy, 24, Williston, VT: Anker Publishing.


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The Impact of Faculty Training on Institutional Performance

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Abstract

Professional development (PD) is offered to help online faculty improve instruction and develop effective teaching strategies. The goal of providing PD was also to make a positive impact on student satisfaction and increase student retention. This paper will present the PD implementation process recently completed by the American College of Education (ACE) to assist EdD faculty with improving the student learning experience and retaining doctoral students.

Introduction

Distance learning is a field that is continuing to grow and, with that growth, continues to change. This constant change in distance learning presents a complex, dynamic environment for online faculty that requires them to constantly refresh their knowledge and their skill set to remain effective in distance learning. Meyer and Murrell (2014) explained that online faculty development itself is changing and must continue to change to match the demands of the online environment. This paper will explore the online faculty professional development (PD) practices at American College of Education (ACE), measuring impacts on student satisfaction and retention before and after a substantial change to the PD process.

Defining Faculty Training

Online faculty training, defined at ACE under the umbrella term of PD, can take multiple forms and focus on multiple aspects of the work of teaching online. The best way to define the system is to explore the elements of PD and how they are delivered and then address the specific approaches pursued at ACE. Broadly, online faculty training is a self-defining activity, it involves training faculty who teach online. In practice, however, the definition quickly becomes more complex.

The two areas of training most relevant to faculty and institutions are the content of the training and the means by which the training is delivered. The importance of these two issues is magnified for online faculty as the distributed nature of the workforce and more technical operating environment create challenges beyond those faced by traditional faculty. The content of PD sessions can include information about the academic discipline itself, pedagogy, theory, expectations of faculty, or other topics (Elliott, Rhoades, Jackson, & Mandernach, 2015), and can be done internally to the institution or utilize third party training and credentialing services (Gregory & Martindale, 2013). The key to an effective PD program is to cover topics that are useful and interesting for faculty (Gregory & Martindale, 2013), and also that are accessible and achievable for online faculty.

Baran and Correia (2014) listed PD fitting into faculty schedules as the second most important factor in faculty engagement with PD, behind only material that could be immediately used in the classroom. This premium on accessibility was echoed by Elliott et al. (2015), who found that the most successful PD offerings were those that provided scheduling flexibility and independence to the faculty, with asynchronous offerings being the most popular. The reason that identifying these factors of content and accessibility is so important is that research consistently shows the need for online faculty PD.
Need for Online Faculty Development

Given the competing priorities for everyone in higher education today activities must be necessary to warrant investment. PD for online faculty is a clearly necessary activity to remain competitive in the modern higher education market. Drew and Klopper (2014), explained this high level of competition as a phenomenon resulting from the global expansion of the education marketplace and resulting premium on program, which correlates to faculty, quality. One core concern regarding online program quality is the retention rate of online students (Gayton, 2015), and there is a broader interest in the overall productivity of online degree programs (Meyer, 2014).

Effective PD for online faculty addresses these critical needs in the field. PD experiences give faculty the tools they need to effectively deliver online programs (Baran & Correia, 2014), and improved faculty approaches to the online environment have been shown to improve student satisfaction (Elliott et al., 2015). Gregory and Martindale (2016) found in their study that PD and program quality are positively correlated in online education, which links PD to student outcomes and, by extension, to retention.

Faculty Training at ACE

ACE faculty training is conducted in online, asynchronous sessions that provide a maximum of flexibility to the diverse adjunct and full-time faculty members who live and work throughout the U.S. In addition to providing accessibility to faculty, this online delivery in the college’s LMS addresses Elliott et al.’s (2015) finding that conducting PD in an online environment serves as a model for best practices and makes it easier for faculty to apply the training in courses. Given faculty’s focus on immediate content applicability when they engage in online PD (Baran & Correia, 2014) and the high importance students placed on faculty instruction and feedback (Gaytan, 2015), topics of common interest for both students and faculty seem to converge.

This convergence was readily visible in ACE’s 2017 PD offerings. The two most popular voluntary training courses were assessment training, with 94% faculty participation, and targeted rubric training, with 91% participation. Dissertation committee training, which also deals with student engagement and feedback, saw a 59% participation rate by the faculty as a whole, but dissertation committee service at ACE is voluntary so the percentage of faculty actively involved in the work who took the training is likely to be higher than the percentage of the total population. These faculty responses would seem to align ACE with the PD best practices from the literature.

While this best practice delivery is an important part of ACE’s PD approach, the goal is to improve student outcomes through quality instruction. Drew and Klopper (2014) found that institutions rarely utilize information gathered from student evaluations to inform enhanced practice. ACE has utilized recognized needs to craft relevant PD for faculty and those efforts are now showing positive results in student outcomes.

Results

The study was conducted at ACE, an online based institution located in Indianapolis, Indiana. The college currently has an EdD student population of 765 students and 34 doctoral faculty members. A quantitative descriptive study with a correlational design was chosen to examine the relationship of PD and faculty’s student satisfaction scores with specific emphasis on the EdD program, as well as how retention rates compared before and after implementing PD. The study spanned the years of 2015 to 2017. In 2015 and 2016, no PD was offered. In 2017, ACE started to offer up to 16 credit hours of PD, as noted in Table 1.

Table 1.  
PD and Credit Hours and Participation

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<thead>
<tr>
<th>PD</th>
<th>Credit Hours</th>
<th>Faculty Participation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doc Refresher</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Assessment Training</td>
<td>2</td>
<td>94</td>
</tr>
<tr>
<td>Targeted Rubric Training</td>
<td>2</td>
<td>91</td>
</tr>
<tr>
<td>Dissertation Committee Training</td>
<td>4</td>
<td>59</td>
</tr>
<tr>
<td>Concept Paper Training</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Student Success Training</td>
<td>1</td>
<td>18</td>
</tr>
</tbody>
</table>
As noted in Table 2, the student satisfaction with faculty scores increased slightly after professional development was offered to faculty. From 2015 to 2016, many of the satisfaction scores decreased specifically in research courses. In these years, students were able to control their schedule, in which students rescheduled research courses as late as possible in the program. In 2017, students were no longer able to control the course progression schedule. Also, doctoral program specific professional development training was offered in an effort to support faculty.

Table 2.
Student Satisfaction with Faculty Survey Scores

<table>
<thead>
<tr>
<th>Year</th>
<th>Student Responses</th>
<th>Faculty Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>2015</td>
<td>1518</td>
<td>85.03</td>
</tr>
<tr>
<td>2016</td>
<td>2063</td>
<td>82.82</td>
</tr>
<tr>
<td>2017</td>
<td>3391</td>
<td>85.04</td>
</tr>
</tbody>
</table>

Table 3.
PD and Student Retention Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>PD Hours (N)</th>
<th>PD Hours Mean</th>
<th>Student Retention %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0</td>
<td>-</td>
<td>56</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>2017</td>
<td>340</td>
<td>7.91</td>
<td>72</td>
</tr>
</tbody>
</table>

Conclusion

ACE follows the continuous improvement model. In 2016, leadership found PD as a lacking area in which providing additional training could potentially improve the student learning and experience. When PD was offered in 2017, some of the main goals were to increase student satisfaction and retention. Both areas increased; however, there was a significant weak correlation found between the 2017 PD hours and student satisfaction scores on faculty. There was also a significant moderate correlation found between the 2017 PD hours and student retention rates. Other factors may have contributed to the positive impact on the student satisfaction and retention rates. Further research is needed to determine which factors have a more direct contribution.

References


Gregory, R., & Martindale, T. (2016). Faculty Development for Online Instruction in Higher Education. thannual, 213. – starts on p. 65


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Empowering Faculty in an Increasingly Standardized Online Environment

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Abstract

In this article, we present seven strategies for effective standardization in online course design and development while meeting quality standards and empowering the role of faculty throughout the process.

When colleges and universities decide to grow their portfolios of online courses or programs, learning design teams often develop systematic processes (Puzziferro & Shelton, 2008) to manage the subsequent increase in volume of course production. In addition to heavier workloads, enhanced expectations for quality, especially with regard to ease of navigation and accessibility, can make systematic practices of standardization very attractive.

Standardizing the course design and development process can be a sensible and useful method for meeting demands and expectations for both quantity and quality. However, if not employed carefully, we believe standardization risks suppressing the important contributions of faculty, as well as minimizing the online students’ learning experiences. For students, too much standardization in course design may lead to “cloned sheep learning” – mundane, repetitive learning activities and assessments, which could squelch motivation and overall engagement with the learning materials. In addition, standardization in course design may unintentionally limit students’ exposure to the individual expertise and primary knowledge of the faculty member – the very expert who is credentialed to lead the course. Repercussions of too much standardization, therefore, may include limitations on student learning achievement and impacts on student motivation, but also on faculty. Standardization, if not carefully used in the design process, could disenfranchise faculty from the online course design process and further perpetuate faculty skepticism toward online instruction as a viable mode for learning (Inside Higher Ed & Gallup, 2017).

In our unique College of Arts and Sciences and Digital Learning partnership, we believe in the practice of ‘balanced’ standardization and the essential role of faculty in a collaborative design and development process. To manage course production volumes and meet quantity and quality outcome expectations, we have adopted several methods of standardization.

In doing so, we have also purposefully developed strategies to empower faculty in order to provide the balance we find so crucial. Below we detail seven of those strategies:

1. Defined and Sponsored Development Period

By identifying a defined period of time for the development of an online course and periodic milestone deadlines within, learning design teams can better plan and manage resources and the sponsoring academic units can have a reasonable date to plan for the launch of the new course. This also gives faculty a known date by which their work must be complete. For faculty who are largely used to working in more of an individual contributor capacity, the team development environment -- and its milestones and final deadlines -- can be challenging. Yet, similar to how we continue to partner faculty and learning designers despite their respective knowledge and skill differences because of the synergies that result from their collaboration, we also find the use of periodic and final deadlines necessary to the process for the sake of progress and resource management.
Generally, our Digital Learning team’s development cycles run concurrent with the academic calendar (fall, spring, and summer). On occasion and when warranted, alternative cycle schedules are used (e.g., multiple semester developments or mid-term starts). Recognizing the significant endeavor required to develop a new online course, in our model, the College supports its faculty working with the Digital Learning team by sponsoring them with an in-load assignment (thereby reducing their teaching assignment) during the fall and spring terms. In summer, faculty are directly compensated for their online course development effort and are asked to work with the Digital Learning team in lieu of other summer assignments.

Ample past experience has shown a positive relationship between the provision of dedicated, compensated time and timely, quality outcomes for the online course development project. Faculty often report that meeting the demands of the project would not have been possible without the directed allocation of time. The College’s commitment to providing time for these developments through in-load assignments is in recognition of the time and effort required to build high-quality online courses and respect for the typically heavy workloads of faculty that would otherwise thwart progress in expanding our portfolio of quality online courses.

2. **Professional Development Requirements and Opportunities**

Most faculty join our program having no prior online experience. Many are somewhat intimidated by the task at hand and feel at a loss as to where to begin, despite years of comfort and success in the face-to-face classroom. To further bolster faculty confidence and quality outcomes in the online environment, there are two embedded professional development experiences for faculty working in our program. The first is a college requirement for all online instructors and is focused on best practices in online learning and familiarization with online teaching within the context of our learning management system (LMS). Our faculty have the freedom to complete this self-paced course when they wish, so long as they have achieved certification prior to their serving as an instructor-of-record. However, due to its helpfulness in familiarizing faculty with online learning, the faculty in our partnership program are encouraged to complete this requirement before embarking on their course development.

Our College also sponsors participation in an optional professional development workshop. Prior to beginning their work with the Digital Learning team, our faculty can elect to participate in a workshop focused on designing courses for significant learning (regardless of modality). The fully online workshop is facilitated by a third-party over a period of two weeks. Through this workshop, the College’s goal is to empower faculty to feel confident in their ability to create courses that lead to significant learning by providing them the chance to begin envisioning their online course and receive feedback from experts in teaching and learning, as well as their workshop peers, regarding their identified learning outcomes, activities, and assessments. In addition, the workshop provides faculty the experience of being an online student and allows them to understand some of the expectations and challenges their own students will bring to their online classroom.

Our faculty have overwhelmingly given positive feedback about the workshop. They find it helpful to experience life as an online student, including learning how to balance course demands in the context of daily life. Their vantage point as a student has also allowed them to glean “do’s” and “don’ts” for themselves as future online instructors. The feedback has also been positive about the content of the workshop; in fact, some faculty have reported that the learned approach to course design was one of the most influential experiences during their decades of being a professor, some have made calls for all of the College’s new instructors to complete the workshop, and, finally, others have voluntarily launched their own faculty learning groups based on the workshop subject.

3. **Initial Expectation Management and Onboarding by the College**

Via the presence of a dedicated college liaison to our Digital Learning team, the College vets applicants to our partnership program and provides initial onboarding to the course development process. Participation in our program is selective and courses to be developed are chosen by the College largely based on the need for online sections to fulfill student demand and degree progression goals. However, it is important that the faculty member who serves as the academic unit representative and the subject matter expert (SME)
understands that the partnership program is a team effort and has the confidence to accept the responsibilities that participation entails.

In preliminary meetings, our college liaison overviews the process and expectations around our partnership program prior to confirming participation. The goal is for the college liaison to clarify for the faculty member the nature of the partnership program, the contributions the faculty member is expected to make as the SME, and the significant support that will be provided through the knowledge and skill of the Digital Learning team. It also allows time to answer questions and hear the faculty’s conceptualizations of and concerns about online learning and online course development, as well as obtain a sense of the faculty member’s teaching style. By painting a clear picture of how the program works, we avoid mismatched expectations. Further, if the faculty member accepts the assignment, they will find their initial work with the Digital Learning team to be less overwhelming due to having a better sense of the process and their responsibilities in advance. Most importantly, in these early encounters, we strive to convey our partnership’s belief that the faculty member is a critical contributor to the online development process and our expectation that the valuable expertise they offer will be readily apparent to students in the resulting course design.

4. **Clear Quality and Outcome Standards**

At the start of each development cycle, faculty are introduced to our university’s online course quality standards. These standards have evolved over time from being institutionally-driven quality metrics to being state-mandated, but have always been based on best practices and the literature on online teaching and learning. Having such standards, and familiarizing faculty with them early in the process, allows them to understand the quality framework within which they will be evaluated at the end of the development period and provides useful guidelines to direct their work. Rather than constraining, these quality expectations are liberating for faculty in that they can focus on the pedagogy and subject matter content without worrying about having to separately research best practices for online learning as part of their development. Instead, these clear standards for quality and a learning design team that helps keep the faculty member’s vision for the course within the expected parameters, allow faculty to use their time more prudently to develop activities, assignments, and assessments that promote student learning.

5. **Structured Course Development Process (with room for flexibility)**

A structured and collaborative course development process provides a framework for the faculty to ensure the project stays on track and within the expected development period. It also helps to set the groundwork for a collaborative workflow and provides a cognitive road map for all team members, especially the faculty. By entrusting the overall management of the endeavor to the Digital Learning team, the faculty member is able to devote more time to the tasks for which he or she is the leading expert—such as defining the course and unit goals, identifying student learning outcomes, and determining course content.

Our development process involves a five-phased approach with built-in milestones to help faculty gauge their time and effort. Also included is an estimated timeframe for each phase to help guide faculty and appropriately pace them throughout the development period. This approach can be easily adapted to any course as the number of weeks in each phase is flexible and highly dependent on whether the course is new or existing. For new online courses, the Digital Learning team may dedicate more time during the planning and analysis phase compared to an existing online course, which may need more time in the design and prototype phase. The completion of the course prototype is the first milestone of the development process and has been a successful tool for helping faculty to envision their online course. Because no two courses (or faculty) are alike, this flexible approach enables the Digital Learning team to meet the faculty member’s needs while still meeting the needs of the course and learner.

6. **Faculty-Friendly Customizable Course Design Templates and Assets**

Faculty course developers are provided with various options for course designs and aesthetics. These pre-built, accessible design themes can be easily modified for any content type—allowing learning designers to create cohesive and consistent online courses. This approach not only facilitates rapid development but also takes the burden off of faculty for creating course designs that meet accessibility requirements and
standards while still allowing them to put a personal stamp on their course. Learning designers utilize these assets to brand the course and cue learners to specific information--incorporating both imagery and iconography to better support the specific content area. While the design templates give each course a professional look and feel, they are simple enough so faculty are confident in their ability to maintain and build upon them well after the development period ends.

7. Collaborative Learning-Focused Practices for Multimedia Creation

Learning designers encourage faculty to include a variety of instructional materials and content delivery methods to maximize learning opportunities for all students. Yet, due to the extensive time and effort required to produce custom multimedia, it is imperative to make strategic decisions, ensuring that the desired multimedia is warranted in light of the course or module’s identified student learning outcomes. While there is no one-size-fits-all approach, learning designers analyze the faculty’s content to identify potential opportunities for multimedia development and interactivity. While these options can vary from infographics to interactive objects to virtual reality, all choices are determined by the content itself in addition to the availability of the instructor for production. This approach requires flexibility from the Digital Learning team in order to match the faculty member’s preferred style and instructional strategies with available resources. However, faculty are also expected to play a sizable role in producing their multimedia, such as writing scripts, conferring with multimedia teams, and recording audio tracks. For all selections, the content is produced through an iterative process--beginning with the faculty member’s initial contribution of ideas to their feedback on prototypes to final approval. This team-based approach gives faculty a leading voice in the decision-making, but enables the learning designers to exercise their informed judgment to allocate resources and produce custom content.

Conclusion

In conclusion, standardization has become a virtual necessity for digital learning teams given enhanced requirements for accessibility and increased demand for online courses. However, when not employed carefully, standardization can inadvertently suppress the creativity and expertise of the faculty. We encourage the practice of ‘balanced’ standardization through conscientious analysis of the impact each choice for standardization has on faculty expression and by purposefully embedding multiple methods of empowerment throughout the online course design and development process.

References


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Is Economics Changing the Quality of Online Education?

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Abstract

Reduced funding from government sources for higher education is causing economic concerns within public universities, forcing university administrators to look at increasing tuition revenue to close the deficit. This investigation attempts to look at the research on the balance between the economics of increasing class size and the delivery quality of online education.

Introduction

The business of education seeks to increase enrollment, educate students, and reduce or maintain cost for students. But in today’s economy, with reductions in state and federal funding levels, is it possible to do all three? Is it possible to balance the execution of the business of education and maintain the quality of education? There have been many strategies suggested to maintain this balance, including the increase in class size as a quick and convenient cost cutting approach. Another option higher education administrators consider is to look at online instruction as the “…mother load…”, a possible solution to the budget reduction because of its infinite target audience of students (Tomei, 2006). This study attempts to look at the how economics is changing the quality of education, using the research on the balance between cost and quality of delivering education.

Colwell and Jenks (2004) investigated the balance between the economic issues of online learning and the quality of education. By maximizing class sizes in online courses to make them more profitable, it demands instructors create an educational experience which does not diminish the quality of education for the students. The gained profit is reduced by an added cost of the technology required to create the proper delivery method for successful online courses (Picciano, 2010; Ranker, 2015). Added to the technology cost is the cost of software which allows the principles of multimedia learning to help students navigate the instructional delivery.

The type of instruction design used is the determinate to the balance maintained between larger class sizes and the effectiveness of online education (Bartley & Golek, 2004). Bartley and Golek suggest that an understanding of the theory of learning models be in place in order to create a good instructional online environment. In this case, it takes more preparation time. By increasing class size, additional faculty hours have shifted to perhaps a 24 x 7 time frame due to email and digital format of the instruction. Others suggest that the savings of campus costs by creating larger online class sizes was diminished by the real cost of quality to the students in the form of interactions with their professors and peers (Beattie & Thiele, 2016).

Class-size has been studied for its effect on student academic achievement and faculty work load, both for face-to-face and online delivery in higher education (Cuseo, 2007; Bartolic-Zlomislic & Bates, 1999). Many studies have looked at the proper number of students in online classes and the results are very mixed ranging from extremes of 10 to MOOC classes of hundreds (Bettiger, Doss, & Loeb, 2014; Griffiths, 2017). Areas of research include variations in subject area (Maringe & Sing, 2014; Mattox, 2012), experience of faculty members in teaching online (Mathis, 2016), and the diversity of students. Researchers have also looked at the work load of faculty members (Hardy & Bower, 2004), student satisfaction (Freeze, Alshare, Lane, & Joseph Wen, 2010; Risquez, Vaughan, & Murphy, 2015), and the economic advantage of teaching online education (Maringe & Sing, 2014; Hornsby & Osman, 2014).

Subject Area

Distance education alone can be very cognitive demanding because it requires students to self-integrate different representations of information such as text, graphics, and or video. This instructional management requires students
to determine on their own what to learn, how much detail, how much time to spend reviewing a topic, and where to proceed next (Dillon, Kokkelenberg, & Christy, 2005). For the faculty, larger classes mean more grading, the type of content to be delivered, and the work it presents for both student and faculty.

Some classes, being objective with consistent factual information, have an advantage over courses which are cognitive in nature. Packard and Holmes (2006) showed that classes which are objective in nature such as statistics are better learned with practice and can use computer scored assignments to enhance student learning without imposing significant time commitments in grading and record keeping for the faculty. They demonstrated that, by using the knowledge of subject matter and common student errors made in the course, the instructor can create answers and distractors to provide instant feedback when students entered either a correct or an incorrect answer. (Packard & Holmes, 2006). Courses which require a constructive teaching approach need to have smaller class sizes to allow students to interact individually with faculty, and will learn better when given specific feedback on their assignments (Taft, Perkowski, & Martin, 2011). Constructive courses, which require more thought and individual response, cannot easily create instant feedback to correct mistakes as the responses are all individualistic. These classes which are cognitive in nature can be improved regarding online assignments if the students are encouraged by the instructor to complete the assignment and resubmit after receiving feedback (Buttner & Black, 2014).

Faculty Experience

Researchers have presented the argument that to create a smooth transition to online instruction for faculty, colleges must place the technical and human support to create a proper learning environment and experiences (Hardy and Bower, 2004). While studying the transition of faculty from face-to-face to online instruction, Horvitz, Beach, Anderson, and Xia (2015) looked at the self-efficacy of the professors. They suggested the critical need for adequate resources and support during the transition period of their first classes taught online. In a synthesis of 67 studies, Wingo, Ivankova, and Moss (2017) found that faculty stated that support was a very important issue in delivering online instruction. Their finding suggested the needed support primarily in the areas of instructional design, peer support groups, and a safe and secure proctoring software.

This is countered with a lack of appreciation by some administrations about the need for paid professional technical help. Support staff in the department is a way to assist faculty to teach online and still maintain a reasonable schedule, but the labor-intensive character of online course development is likely the greatest barrier (Hodges & Shepherd, 2013). It takes an extraordinary amount of time to design a course for electronic delivery. And the content development effort is sometimes exacerbated by unnecessarily arcane technical platforms (Morgan, 2000). While WebCT gets increasingly simpler to use as a design platform, its earlier versions weren't particularly user-friendly. It's imperative that learning how to use the software be secondary to the epistemological issues faculty need to address in order to ensure course quality. Another barrier, according to Morgan (2000), is "RE"-development. "RE"-development occurs after each semester when faculty change a portion of the course design for next semester based on prior experience teaching it.

Diversity of Students

Online education has permitted a change in enrollment allowing diverse populations to gain access to an education that was limited to them before this delivery method. In the period between 2002 and 2006, the enrollment of students taking online courses averaged 21% of growth in their five year study (Allen & Seaman, 2007). Part of this is due to the fact that students are no longer limited to living on campus or commuting to campus. The increased enrollment includes not only commuters but non-traditional students who are working full-time or have child care responsibilities (Chapman & Ludlow, 2010). By removing the residential classroom experience, Ortagus (2017) proposed that students were able to increase their education due to the convenience of online delivery. Students are no longer penalized by taking time away from work, thereby reducing their cost to take courses. Student with family responsibility are freed of the rigid class schedules found in traditional higher education. A study by Engle and Tinto (2008) introduced that minorities, low-income, and first generation student have more opportunities to pursue a better education using online learning.
Work Load for Faculty

Early movement to online instruction was to use existing material from face-to-face coursework and just apply technology to move it to online (Howell, Saba, Lindsay, & Williams, 2004). But there is a learning curve which often travels through traditional face-to-face, blended, synchronous and asynchronous delivery. One of the early methods of producing online instruction was to video tape existing face-to-face courses. Video classes can be constrained due to the limited attention span of the observer based on the relevance of the material. O’Bannon, Lubke, Beard, and Britt (2011) studied the effects of using podcast to introduce material into a course. They found students could find the material less than thought-provoking if it was not in their area of interest. Whether or not the individual student is able to concentrate on the subject is related to the relevance to that individual and the dynamic of the delivery (Chen, Lambert, & Guidry, 2010).

With the increases in class sizes, the discussion about the appropriate number of students per class was another area to be addressed. Early discussions by Simonson (2004) suggested that there was a myth in distance education. The myth was it takes “…more time to teach online, therefore smaller classes are needed.” He went on to suggest that organization of the class material reduces the concern about larger class sizes. The time for faculty to develop classes initially is extensive, but as the use and further development of existing classes continues, the work load becomes less. A study done by Orellana (2006) suggest that online instruction requires more time and more money than classes taught face-to-face. Added to the increase in class size, faculty hours have increased to perhaps a 24 x 7 time frame due to email and digital format of the instruction.

Student Satisfaction

Student satisfaction with the delivery of online course is influenced by several conditions; their experience, clarity of delivery, and interactions with peers and/or faculty (Ferguson & DeFelice, 2010).

A study by Bennett and Monds (2008) looked at the important characteristics of intrinsic motivation of the students when determining the successful navigation through their coursework. These characteristics included interest/enjoyment, effort, relevance, anxiety and control. Student experience could also be measured in terms of enjoyment, engagement and relevance (Bailey, Hendricks, Applewhite, & Austin, 2015). Student control is determined by the design and structure of the course, including organization, clarity of subject matter, and advanced preparation (Barr & Miller, 2013). The challenge of understanding the audience and creating materials to engage a diversity of students is an issue for instructors (Hardy & Bower, 2004).

A sense of social isolation, and its reduction by promoting student to student interaction, was studied by Madland and Richards (2016). This isolation can also be reduced by the student-faculty interaction which increases student engagement (Reeves, 2006). Song and McNary (2011) suggested that multiple methods can influence the quality of learning by students including reading and responding to peers, using chat rooms, and discussion boards to reduce isolation.

Economic Advantage

Educator Perceptions of Challenges to Use OER

Online instruction that can be delivered instantaneously around the world removes the limitations of geography, and time, meaning that any and every education provider has the potential to reach a global market (Bartolic-Zlomislic & Bates, 1999; Evans & Haase, 2001). By creating larger classes, the labor cost remains the same, but adds additional income in the form of increased student participation (Deming, Goldin, Katz and Yuchtman, 2015). Distance education can be a good source of additional income by increasing the number of students without the need of additional class space (Taft, Susan H.; Perkowski, Tracy; Martin, 2011).

According to the American Association of University Professors (AAUP), the growth of online classes has stimulated the use of adjunct professors. They suggested that while tenure-track positions increased by 18%, part-time positions increased by 10 times that rate. The fear of using adjunct professors was presented by Stephen, Sammons, and Poulin, (2007) suggesting that lower quality results from using less expensive and less experienced instructors.
Conclusion

This investigation attempted to look at the research of class size and the quality of education. There is no conclusion gained by this investigation as the research presented here only suggest some of the issues about the complexity of the attempt to maintain the balance between the economics of quantity and quality of educating. With online education the variables are many and like the student we work with, they are both uniquely individualistic with not one solution for all. This is issue which is never ending as long as educators attempt to perfect their craft.

References


Madland, C., & Richards, C. (2016). Enhancing Student-Student Online Interaction: Exploring the Study Buddy Peer Review Activity. International Review of Research in Open and Distributed Learning, 17(3).


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Effects of an Open Educational Resources Initiative on Students, Faculty and Instructional Designers

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Abstract

A research and development project was undertaken to document, analyze and report the effects of implementing a free/open educational resources (OER) initiative within Sullivan University’s College of Business Administration. The project involved the redesign of courses using no-cost textbooks and other educational resources, in place of resources costing students hundreds of dollars per course. Quantitative data were gathered from 311 students enrolled in sections of two widely-used undergraduate courses over four quarters. Qualitative data were gathered from interviews of faculty and instructional designers involved with the project. Results indicated that students in the OER courses were more satisfied with the cost and quality of the courses and the instructional materials and were more likely to recommend the course to others, compared to students in Pre-OER courses. The use of OER based on student learning outcomes was judged by faculty subject matter experts and instructional designers to have a positive effect on the quality of course design and the relationship between subject matter expert and instructional designer, compared to courses based on textbooks.

Introduction

The United States Government Accountability Office reported that the cost of textbooks in the decade of 2002-12 increased 82%, while overall consumer prices during the same period rose 25% (USGAO, 2013). Estimates of average annual course material spending by students ranges from $638 (National Association of College Stores, 2014) to $1,200 (Baum & Ma, 2013). It is estimated that, on average, students are using over $300 of their federal financial aid each semester for purchasing textbooks, while some students are paying more than $400 for a single textbook (Senack & Donoghue, 2016).

An analysis was undertaken comparing the cost of textbooks used in fully online courses at Sullivan University. During the spring quarter, 230 unique online courses were offered. Of these courses, 72 (31%) required students to purchase a textbook costing more than $200. Fourteen of these courses required a textbook costing more than $300. In some of these courses, additional books or materials were also required (Piña & Moran, 2017).

Due to enrollment management strategies implemented during the summer term, the number of individual courses decreased by 38. However the percentage of courses with a textbook above $200 rose to 36%. Even more distressing was that the number of textbooks at the $300 or above price point doubled to 28. Also, for the first time, three books were priced above $400. Many of these increases were brought on by a single publisher, who increased the cost of its books by $30-$65 from spring quarter to summer quarter. The price increases were for the same editions of the textbooks currently in use—rather than for new editions of these books (Piña & Moran, 2017).

The analysis also revealed that, in addition to printed textbooks, students in many courses were also required to purchase software and other online content from various vendors and that more than 30 different products (each with different interfaces) were being used. Some of this content was bundled with textbooks, but would have to be purchased separately if the students opted to rent or purchase a used textbook. One publisher had eight different products—with eight different interfaces—that required students to purchase course codes and/or register accounts on the vendor’s site and leave the learning management system to use (Piña & Moran, 2017).
Free and Open Educational Resources

One strategy for addressing the high cost of textbooks and other education materials has been the use of free and open educational resources (OER).

The William and Flora Hewlett Foundation, one of the primary promoters of OER have described them thusly:

“OER are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge” (Atkins, Brown, & Hammond, 2007, p. 4).

These resources include textbooks, presentations, audio recordings, videos and other learning objects produced by faculty and subject matter experts. OER advocates often maintain that access to information and content is a fundamental human right, which should be available at no cost to the public in order to shrink the digital divide (Piña, 2015). Whereas traditional copyright is employed to limit the distribution of materials, open content licensing uses the power of copyright to make materials more widely available (Piña, 2015, Seaman & Seaman, 2017).

A recently survey of 2,700 faculty conducted by the Babson Survey Research Group (Seaman & Seaman, 2017) revealed that faculty awareness of OER is rising, but is still very low, with just 10% of respondents indicating that they were “very aware” of OER and another 20% reporting that they were “aware.” Two years earlier, 5% of faculty reported being “very aware” and 15% reported being “aware” of OER (Allen & Seaman, 2015).

Research into the effects of replacing traditional textbooks and instructional materials with OER is in its infancy (Farrow, Pitt, de los Arcos, Perryman, Weller & McAndrew, 2015). However the emerging studies published thus far are encouraging. Besides obvious cost savings (e.g. Hilton, J., Robinson, T., Wiley, D., & Ackerman, J. (2014), adoption of OER in place of costly materials has been associated with higher standardized test scores (Robinson, Fisher, Wiley & Hilton, 2014), higher scores on course assessments, lower failure rates and decreased attrition (Pawlyshyn, Bradlee, Casper & Miller 2013) and decreased student costs without a decrease in the quality of the instructional materials (Bliss, Robinson, Hilton & Wiley, 2013).

Several institutions have adopted major free/open educational resource initiatives. Tidewater Community College, the 11th largest community college in the U.S. (44,000 students) launched its first “Z-Degree” (for “zero textbook cost”), by replacing printed textbook with free and open alternatives. The “Z-Degree,” an associate of science in business administration, began in 2013 and has experienced a 6% decrease in student attrition, compared to the same degree offered with costly textbooks (Wiley, Williams, DeMarte & Hilton, 2016).

The University of Maryland University College (UMUC) is one of the country’s largest online degree providers, with more than 85,000 students (UMUC, 2016). In 2013, UMUC began implementing a major curriculum redesign to replace traditional textbooks with free/open educational resources in its more than 700 undergraduate courses (Schaffhauser, 2016).

As the concept of OER is being developed, the definition of truly “open” resources has been defined by David Wiley (2014) using “The 5Rs of Openness”:

- **Retain** – the right to make, own, and control copies of the content
- **Reuse** – the right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video)
- **Revise** – the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)
- **Remix** – the right to combine the original or revised content with other open content to create something new (e.g., incorporate the content into a mashup)
- **Redistribute** – the right to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy of the content to a friend)
It should be noted that in this article, the term OER will be used to denote any materials that are deployed within a course at no cost to students, whether or not they meet all 5Rs.

**Purpose for the Project**

The project involved the strategic redesign of courses using no-cost textbooks and other educational resources in place of resources costing students hundreds of dollars per course, the training of faculty subject matter experts in the selection and use of OER and open content licensing and the collection and analysis of data on the effect of the OER initiative on students, faculty and instructional designers.

This project sought to answer the following research questions:

- R1: Does the use of free/open education resources have an economic effect on students?
- R2: Does the use of free/open education resources influence student satisfaction?
- R3: Does the use of free/open education resources influence student retention and grades?
- R4: What are the effects of free/open education resources on faculty subject matter experts?
- R5: What are the effects of free/open education resources on instructional designers?

**Method**

**Subjects**

Data were gathered from 311 undergraduate students enrolled in two courses that were required for multiple degree programs: MGT304 Principles and Management and MKT304 Principles of Marketing. Fifty-six percent of respondents identified as female and 44% identified as male.

*NOTE: Other courses were originally intended to be included in the study and were developed using free and open resources in place of costly materials. However enrollments in these courses were deemed to be not high enough for a reliable sample of students.*

As shown in Figure 1 below, student experience in purchasing their textbooks was overwhelmingly via their institutions’ bookstores or outside bookstores or rentals. Only 8% of students had any experience using free textbooks or library e-books in their courses.

**Figure 1.**
*Prior Student Experience in Purchasing Textbooks*
Procedures

*SMEs Trained on OER and Creative Commons*

Both the MGT304 and MKT304 courses were redesigned and developed during the winter and spring 2016 quarters. Course redesign and redevelopment focused on removal and replacement of the respective “paid” course textbooks with free/open educational materials. Full-time faculty from the College of Business Administration (COBA) were assigned as subject matter experts (SME) to work with the University’s Instructional Designer Team to redesign and develop both the online and on-campus (face-to-face) versions of the courses. Each SME had experience teaching their respective courses, but no prior experience in course design with OER. Training was developed and delivered to the SMEs on Creative Commons licensing and on instructional design and the selection, evaluation and implementation of free and open educational resources in online, hybrid and on-campus (face-to-face) courses.

*Course Mapping*

Perhaps the most significant adjustment made to the instructional design/development process transitioning from courses designed using cost-textbooks to OER course materials was to shift responsibility of approving the course map from the SME to the COBA Dean. Traditionally, the SME would develop the course map during the first weeks of the 12 week contracted course development period. This process would often involve negotiations with the assigned instructional designer if the course objectives and/or weekly learning objectives were not stated in terms of measurable student learning outcomes and if the assessments were not sufficiently aligned with the objectives. This often resulted in strained relationships between SMEs and IDs.

The course mapping development and approval processes were adjusted to accommodate the OER project. Specifically, the adjustment meant that course mapping for the targeted OER courses would be completed at the academic department level (in this case the College of Business Administration) prior to the start of the contract course development period; thus allowing the full quarter for the SME to develop or select the course.

Traditionally, the course map approval process was delegated by the COBA Dean to the SME as part of the course redesign/redevelop assignment. However, the approval process was adjusted for implementation of the OER grant to be overseen directly by the Dean, in order to ensure that the course and student learning outcomes driving course development would be established before the start of the contracted course development period.

*Course Development*

SMEs were permitted to redesign/redevelop the course as they felt best given the stated course objectives/student learning outcomes identified in the course. Interestingly, the MGT304 course identified a variety of OER resources, assembling them to address the course objectives/student learning outcomes. While the MKT304 course used a free, creative commons textbook. In both cases, the resources used in the course redesign/redevelopment process added no cost to the student; thus fulfilling the research grant objective for OER.

Each SME worked collaboratively with an assigned instructional designer who served as the development project manager (Piña & Sanford, 2017). Each course was initially developed as an online course using course development tools available through the learning management system. The face-to-face course outline was developed in reference to the online course to ensure continuity for course delivery. After course development, both courses were reviewed and approved by the COBA Dean and administered to online and face-to-face students in the summer 2016 and following quarters. Additionally, each SME was paired with a Sullivan University librarian to assist them in locating high quality OER course materials.

*Data Collection*

Comparison of Pre-OER and Post-OER student satisfaction was measured using a pre/post survey design. The Pre-OER data collection period occurred in the winter and spring 2016 quarters and resulted in 156 student responses. The Post-OER data collection period occurred in the summer and fall 2016 quarters, resulting in 155 student responses. Student economic impact was measured by calculating the costs of existing MGT304 and MKT 304 textbooks. Data on Pre- and Post-OER final grades and retention rates were gathered from the University’s student information system.
Instrumentation and Analysis

The Pre-OER data collection instrument consisted of nine questions. The first six questions used a 5-point Likert-type scale to collect student perceptions regarding their satisfaction with course costs, the quality of course materials, the quality of non-textbook readings, the quality of video materials, the overall quality of the course, and whether the student would recommend the course to another student. One question allowed the student to designate the course being taken (e.g., MGT304). One question asked if students to identify methods used to acquire their textbook. The last question collected student gender data.

The Post-OER data collection instruction consisted of eleven questions. The first six questions likert-scale questions and the demographic items were identical to those in the Pre-OER instrument. The three additional questions collected student perceptions related to their level of satisfaction/dissatisfaction with OER versus printed textbooks, whether they would desire more classes that used OER materials, and preference for enrollment in colleges/universities that used OER.

A t-test was undertaken to compare the mean values for the separate Pre- and Post-OER groups and to assess significant differences in any of the variables. Specifically, the study compared seven variables: i.e., textbook costs, material quality, non-textbook quality, video quality, course quality, course recommendation, and total comparisons. An additional focus of the research project was the effects of the OER initiative on faculty and instructional designers. Qualitative data collection included semi-structures interviews with faculty who served as subject matter experts for course development and who taught the Pre-OER and OER courses and with the instructional designers who worked with the faculty subject matter experts to design and develop the courses.

Results

R1: Does the use of free/open education resources have an economic effect to students?

There was a significant economic effect on students in OER courses versus those in Pre-OER courses, with students in OER saving between $172 and $336 per course. If it is estimated that the total savings for students in the summer 2016 MGT304 and MKT304 courses was $51,186 and estimated annual savings of students taking these courses would be at least $200,000. If all of a student’s college courses were redesigned with OER, then the savings for each COBA student could be upwards of $1,000 or more per academic term; $4,000 or more per academic year. Extrapolated out for a student’s entire college stay could be as much as $16,000 or more for a four year degree program. As previously noted, this level of student savings would be very appealing to any institutions faced with increasing costs, lower student enrollment, and facing a radically changed higher education marketplace. Therefore, the research grant was not only timely, and its findings a value add to any college or university administrator searching for interventions capable of increasing their competitiveness to attract and retain students.

R2: Does the use of free/open education resources influence student satisfaction?

Table 1 displays the results from a t-test indicating significant differences between the Pre- and Post-test groups for all of the individual variables examined and combination of variables for each group. Results show that Post-test group perceptions for all variables tested were significantly different from Pre-test group perceptions related to course design using textbooks versus OER resources. Specifically, Post-test results showed significant differences for Textbook Costs (t=-20.144, p=.000), Materials Quality (t=8.806, p=.000), Non-Text Quality (t=-7.901, p=.000), Video Quality (t=-6.234, p=.000), Course Quality (t=-2.878, p=.004), and Recommend Course (t=2.878, p=.001). Additionally, the combined totals for each of the study variables showed significant differences in Pre- and Post-test group perceptions related to course design using textbooks versus OER resources (t=-12.426, p=.000).

Results of student surveys indicated that students in the OER courses were more satisfied with the cost of their courses and judged the free/open materials in their courses to be equal to or higher in quality than the commercial materials used in their other courses. More OER than Pre-OER students would recommend their courses to others and more students would prefer OER –based courses than course using traditional print textbooks. To ensure the feedback provided though online teaching observations is both meaningful and constructive, administrators of online education programs should provide training to ensure those conducting the observations are experienced and knowledgeable regarding the online environment and effective teaching in that environment. For example, training
workshops can be offered throughout the year to provide faculty members the opportunity to observe the evaluation process from multiple perspectives.

Table 1.
*T-Test for Pre- and Post-Test Group Responses for Textbook or OER Course Materials*

<table>
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<tr>
<th>Test Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-test</th>
<th>P</th>
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<tr>
<td><strong>Textbook Costs</strong></td>
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<td></td>
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Students in the Post-OER courses were asked three additional questions that were not in the Pre-OER survey. The first was to determine whether students in Post-OER courses would like to take more courses that utilized free/open educational resources. Results displayed in Figure 2 below showed overwhelming support for additional OER-based courses with 88% of students in agreement (38%) or strong agreement (50%) that they wish to take more courses that use OER, while only 4% disagreed or strongly disagreed.

Discussion

Figure 2.
*I would Like to Take More Courses that use Free/Open Educational Resources*
Additionally, students in Post-OER courses were asked whether they would be more likely to enroll at a particular college or university if they were aware that the institution featured the use of OER. As shown in Figure 3 below, 80% either agreed (36%) or strongly agree (44%) that OER would be a significant motivator in selecting a college or university.

**Figure 3.**
*I would be More Likely to Enroll in a College or University if I knew that it Used Free/Open Educational Resources for its Courses*

The last survey item assessed the anecdotal claim that a large number of students would prefer to take classes that utilized printed textbook, rather than online/digital materials. Results shown below in Figure 2 indicated that 19% of students surveyed agreed (14%) or strongly agreed (5%) that they would rather take courses with printed textbooks. Sixty-two percent of students, indicated agreement (25%) or strong agreement (37%) with the use of OER-based materials.

**Figure 4.**
*I would prefer to take classes that use printed textbooks instead of free/open educational resources*

*R3: Does the use of free/open education resources influence student retention and grades?*

An analysis of final grades and end-of-term retention data was undertaken for winter and spring (Pre-OER) sections of MGT 304 and MKT 304 compared to summer and fall (Post-OER) sections of the same courses. No significant
difference was found for either grades or retention, indicating that switching from paid materials to free/open materials did not have a detrimental effect on these student outcomes.

**R4. What are the effects of free/open education resources on faculty?**

Interviews with the faculty who served as subject matter experts for the OER courses yielded some very interesting data. Faculty stated that they were initially reticent to switch from textbooks to OER, as textbooks provided a sense of security and familiarity.

Once they had a chance to learn about and utilize OER, the nervousness gave way to excitement and a sense of liberation.

The following comments are representative:

> “At first, I felt like I was flying blind without a textbook to dictate the content and course sequence; but I soon discovered that focusing first upon the student learning outcomes and then selecting the most appropriate materials is a much better way to go.”

> “Converting my course to OER was a revelation. I had previously thought of the print textbook as a security blanket. What I came to realize was that it had become a straightjacket which told me what to teach, when to teach it and how to teach it.”

> “I now feel a sense of liberation and freedom to build courses in a way that meets our desired student learning outcomes and to use a much wider variety or resources to meet those outcomes.”

> “The commitment to use OER in classes takes some preparation and involves some searching to find materials, but I am able to mix-and-match different parts of books, videos, website and other materials that are much more interesting to my students and to me as a teacher.”

**R5: What are the effects of free/open education resources on instructional designers?**

Interviews with the instructional designers revealed that the OER project had resulted in improved working relationships with faculty SMES and overall higher course quality.

The following comments are representative:

> “Relationships with some SMEs could get adversarial. SME’s would sometimes fight us about making certain that learning objectives were measurable, that assessments aligned with the objectives and that the content was robust enough to meet the University standards for online courses and federal credit hour requirements. Using the course maps and OER and starting with learning outcomes, rather than textbooks, has nearly eliminated these problems.”

> “We used to require that 80% of the course content be the SME’s original work. As a result, most of the content was just multiple pages of text, some of which was not properly attributed and required a significant amount of editing by IDs. The OER course content is much higher quality and the courses are much richer with multimedia content.”

> “Our biggest problem has always been that too many SMEs do not deliver their course content on time, which limited the time available for us to do the course development and QA. Replacing the mandates for original content to having them select the best OER for their course has resulted in much higher on-time delivery.”

Both faculty and instructional designers involved in the project unanimously observed that the move to free/open resources based on student learning outcomes improved the course development process and improved the working relationship between the faculty and instructional designers. The use of course maps by the academic department to move the formulation of course objectives and primary assessments to the department level, eliminated the “tug of war” between ID and SME, allowing the SME to focus almost exclusively on course content. Faculty and
instructional designers also agreed that the use of OER in place of original, primarily text-based content from the SME resulted in overall higher quality course content that was more multimedia in nature and was delivered on time.

Conclusions

The findings of this study affirm that the effects of a Free/Open Educational Resources (OER) initiative on students, faculty and instructional designers—plus an academic department and the institution’s course development process—are overwhelmingly positive. There was a significant positive economic effect for students. Contrary to the conventional wisdom that materials sold by publishers must be superior to materials made freely available, students judged the OER materials to be superior to traditional textbooks and found courses that used OER materials to be superior to the same courses using traditional costly publisher-produced materials. Additionally, more students in OER-based courses reported they would recommend these courses to other students, would rather enroll in more courses that use OER and would be more likely to enroll in an institution that used OER in their courses. This study found no evidence that students were educationally disadvantaged or were more likely to drop courses in which free and open educational resources were used.

Faculty and instructional designers were also unanimous in their assessment of the effects of the OER initiative. They concluded that the implementation of OER, coupled with the subsequent changes in the course development process resulted in higher quality courses and a higher quality working relationship among those who developed the courses.

As a result of the OER initiative, all undergraduate courses in the College of Business Administration are shifting from costly textbooks and instructional materials to free/OER textbooks and other materials. Other academic units within the University are now following suit. In addition the COBA has shifted its basic course design paradigm from “putting face-to-face courses online” to “online drives the bus” --using the online course mapping procedures to drive the development of on-ground courses. In 2018, the Provost approved a plan by the Dean of COBA and the Associate Provost for Instruction and Online Learning to train all academic leadership in the use of course maps and OER and implement the COBA course development paradigm university-wide.

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References


Piña, A. A. & Moran, K. A. (2017, December). Changing course design culture with free and open educational resources. Presented at the annual meeting of the Southern Association of Colleges & Schools-Commission on Colleges, Dallas, TX.


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Career Readiness – The Missing Piece

Oscar W. Raile
The University of Virginia’s College at Wise

Abstract

A simple ePortfolio project developed around NACE career competencies, critical skills employers identified, progresses well at first. Then the team identifies some recurring themes observed by both faculty advisors and career development specialist that have not been addressed. A review of the literature suggests these themes affect both retention of students and their ability to identify a career vision. This session will review the issues identified along with the interventions delivered through a new career readiness class.

Introduction

Our career development office requested help setting up an ePortfolio capability to help students in collecting and organizing artifacts that could be used as documentation of skills, experience and achievements when seeking employment. The content framework would be based upon National Association of Colleges and Employers (NACE) career competencies, critical skills employers need. Survey of hosting options revealed the college’s Moodle LMS could be used to host the ePortfolios and materials to guide students in the use.

These competencies are:

- Critical Thinking/Problem Solving
- Oral/Written Communications
- Teamwork/Collaboration
- Digital Technology
- Leadership
- Professionalism/Work Ethic
- Career Management
- Global/Intercultural Fluency

It sounded like a quick, easy project of creating a course shell, set up topics for creating the ePortfolios, adding the NACE competencies as topics then adding learning content for each competency. After all, many schools have career courses and literature suggests these courses help both with career focus and also with retention while in school.

Underlying Issues

Discussions on the content and activities for each of the NACE competencies began revealing common issues encountered by career development and faculty working with students. Given the frequency of certain issues being mentioned, the decision was made to conduct a learner assessment to determine if the content included needed to be expanded to address these issues.

Some key points the assessment revealed are:

- Nearly 60% of students are first generation college students (FGCS) – therefore a focus of this effort
- Our FGCS look more like adult learners with 1 or more jobs and family responsibilities
- Most show good to strong academic achievement and work ethic
- Many stated their goal was just “get a job”
- Many students have difficulty presenting their strengths in mock and real job interviews
• Cultural factors from primary region that could impact interviews
  o "Bragging” can be a negative
  o “Selling oneself” as the best candidate can appear as bragging
  o Lack of a career vision
  o Common job source was “Know someone looking for people” – typically short-term labor/service
• May lack family role models that pursued careers
• The concept of building a career seemed to be lacking in many FGCS
• Millennial issues were also reviewed for similarities and differences with FGCS.
• The need for a guiding vision was a key point in literature on both groups.
• Course design focus on FGCS and cultural factors in the process of developing a career vision

The “next job” viewpoint would suggest that FGCS background may be limited to following a series of jobs and only some may actually envision and achieve long term careers. Therefore, they may have difficulty visualizing and articulating a “vision” of their unique talents, skills and interest and how those can enable them to make a significant contribution in the workplace. A lack of understanding of careers and the process of building a career may explain their vision of the future is just “finding a job.”

Literature Review

Without a vision to guide decisions, the degree of challenge these students face when transitioning to the workplace can be overwhelming. Raque-Bogdan and Lucas (2016) address this in their statement “Seeking employment is the single most confusing and terrifying closure experience for FG.”

I would suggest that FGCS often face challenges in career selection, planning and management similar to the way they face challenges in higher education as Maietta, H. (2016) describes:

• Don’t know the language of academia
• Don’t know the questions to ask
• Don’t know the resources available to support them
• Have no “guide” within the family
• Are a “Hidden minority”

Therefore, activities during the career readiness class should provide opportunity to practice working with job listings, writing effective responses to job requirements and describing how their skills, talents and interests (passion) work together enabling them to make a significant contribution if selected for the job.

Careers are changing and some key points found in much literature the literature reviewed are:

• One company careers – primarily gone and probably won’t come back
• Company training programs
  o In the past – many provided career management and guided training sequences
  o Now increasingly “firefighting” for regulatory, safety, specific skills, etc
• Personal responsibility required for Career management and education requirements

Peter Drucker describes the changing workplace noting differences between Industrial age and Knowledge age paradigms.

• Industrial Age – Subordinates do as told (simply resources for managers to direct)
  o cog in a machine, do your function
• Knowledge Age Workers – “What should my contribution be?”
  o People are no longer just a function of job description

Covey & Colosimo (2009) also note this change:

• Industrial Age – a tool for others to use
• Knowledge Age – Solution provider for significant issues
• Must create their own portfolio of strengths to guide choices and career development
• Portfolio of strengths must document:
  - Talents – things that come easy and we do well
  - Passion – Job related things that energize us, can lose track of time while doing
  - Conscience – Our real responsibilities to organization, customers and co-workers
• Emphasize the need to “Teach to learn” how to envision and pursue a career

So not only may these students have a challenge with the idea of career, the very nature of the workplace is in change where people must become more adept at career development and management, tasks that are emphasized in much of the literature on this subject.

One other essential element students will need for success is what Angela Duckworth describes as “grit” which may be simply described as the lifelong persistence to set goals, pursue them, learn from failure and continue toward the goal. Duckworth’s graph of grit by level vs age show it is lowest for the young and increases throughout life. This concept is essential for FGCS feelings of inadequacy and Millennials conditioning to expect instant gratification.

Duckworth (2016) states that there are four Psychological assets that mature paragons of grit have in common and they tend to develop over the years in a particular order (p91):

• Passion – I love what I do!
• Capacity to Practice – Drive to work each day to do better than yesterday
• Purpose – My work is important both to me and to others
• Hope – keep going through difficulty and doubts. I resolve to make things better!

Simon Sinek’s “Start with Why?” echoes the need to know “What you care about.” He suggests that the goal of hiring is not to hire people that need a job rather hire people “who believe what you believe.” These are the people who will work like your goals are their personal mission and take joy in seeing them accomplished. I would suggest that “Your story” gains power when the employer can see a shared passion as you describe what they believe in your personal beliefs of how you can make a significant contribution to the job they are trying to fill.

Pink (2012) states “The most successful people, the evidence shows, often aren’t pursuing conventional notions of success. They’re working hard and persisting through difficulties because of their internal desire to control their lives, learn about their world, and accomplish something that endures.” Intrinsic motivation “is devoted to becoming better and better at something that matters. And it connects that quest for excellence to a larger purpose” (pp.77-78).

The Search for a Guiding Vision – The Missing Piece

Simon Kemp’s site has an article entitled “Career Planning in 60 Seconds” that displays this approach in a way that seems to resonate well with our students.

“The easiest way to start finding the way to your ‘heart’ is to write lists of all the things that fit in the three yellow (outer) circles of the diagram, based on your own unique preferences and circumstances:”

Figure 1.
Informal discussions with students about this graphic reflected excitement with comments about how this was powerful. Easily understood and something they could actually use. This diagram and approach provides a foundation for exercises and supporting materials to guide the development on a career vision. The original NACE competencies will be introduced to with reflection on how each apply in the chosen field and where the student needs to build strength. Opportunities to practice self-evaluation and development of remedial study support the growth of self-direction throughout the course.

Course Design

So a key part of this course design will be based upon identifying the elements in the top two outer circles so potential jobs can be examined in the lower one to see if they truly “fit” with the other two.

Critical questions to be explored during the course to guide this discovery are:

- What do I have such a passion for that I can do it for recreation as well as a job?
- What are my talents and skills and how do they support those things I am passionate about?
- Which careers match these?
- What are the prospective employer’s needs?
- How can my passion, talents and skills make a significant contribution in this type of job?
- Where are jobs found that are a step into these careers?
- Where would you be willing to go for these jobs?
- How far up the ladder” can you really see yourself rising?
- To what extent would you be willing to change your lifestyle and “family ties” for a career?

With a career objective identified (or at least an area of interest), the student build upon the understanding of their passion, skills and talents using the NACE career competencies to strengthen their knowledge and skills in each area. Students will use the ePortfolios to their writings from the discovery phase and collect artifacts of their work under each element.

From the self-discovery and artifact collection, the student will develop a written “story” which they will be able to present in a job interview.

The Final Assessment:

- Student must identify a job advertisement that fits in their own “Intersection of genuine interest, skills and opportunity”
- Explain what about the job stirs their “genuine interest”
- Demonstrate how their skills and talents would enable them to “make a significant contribution” if they were offered the job
- Tailor a resume to the job requirements
- Write a cover letter for the resume

References


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Effective Use of “Guest Lecturers” in Online Instruction

Emily Rogers
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Howard S. Carrier
James Madison University

Abstract

“Guest lecturers” can share insight and experiences, especially in classes that support professional programs, but how can they be best utilized in the online teaching environment? In presenting this paper at DLA 2018, the authors seek to discuss this question, drawing upon their recent, empirical research investigating the role of guest lecturers in online library science classes.

Introduction

The genus of this paper lies in its authors’ own professional experiences. Both authors are experienced, practicing academic librarians working in public services roles in American universities. The authors have also worked as Adjunct Professors, serving as course instructors for online classes delivered in an American Library Association (ALA)-accredited Master’s in Library and Information Science (MLIS) program. In the context of their work as librarians, the authors have, from time to time, served as “guest lecturers,” providing insight about their work to library science students; as Adjunct Professors they have invited guest lecturers into their classes.

Bell (2003, p.10) observes, “Guest lecturers are often used to give students the best possible learning experience by combining academic theory with real work experience. They are typically subject experts who can bring to life what students only read in a textbook.” The MLIS curriculum, supporting a professional, vocational program, would therefore lend itself to including librarians as guest lecturers. Academic librarians present an appealing resource to MLIS professors as potential guest lecturers. Frequently holding faculty status themselves, employed in colleges and universities, and, in the case of public services librarians, experienced in working with students on a day-to-day basis, academic librarians appear almost tailor-made for the guest lecturer’s role.

An additional factor to be considered is the place of online MLIS programs within library science education. The ALA reports accredited MLIS programs at 60 institutions; of these, 34 institutions are categorized as offering a “100% online program” (ALA, 2018), although such institutions may offer their 100% online programs alongside traditional, face-to-face or hybrid models. Focusing on the 100% online programs, this research investigates how guest lecturers are used in online MLIS programs, and, drawing upon data received from participants who teach MLIS classes, offers suggestions for effective use of guest lecturers.

Literature Review

The most frequently noted reasons for inviting guest lecturers into the classroom are to increase student engagement, to vary the method of content delivery, to connect students with practicing professionals, and to connect course material with real-world applications. Professional programs of study such as the health professions, education, and business frequently invite practitioners to have contact with students. For instance, guest speakers for accounting and pharmacy professional development events have helped prepare students for interviews, licensure exams, and potential career paths (Metrejean, Pittman, & Zarzeski, 2002; Zorek, Katz, & Popovich, 2011). Marketing classes benefited when provided with a preparatory framework encouraging students to “link real-world issues to class concepts” and “analyze real problems and offer recommendations” (Dalaks, 2016, p. 95). The barriers of time and distance were overcome by nursing leadership instructors who, with their students, started video recording 10-minute interviews with guest practitioners to help students gain “insight into what it means to be a nurse” as well as leaders (Sortedahl & Imhoff, 2016, p. 114).
The distance learning classroom offers guest lecturers additional opportunities to overcome barriers of distance and synchronous timing. Early discussions of the visiting speaker in the online classroom recognized the risk of technological problems while emphasizing the “collegial” nature of the discussion-based online course that “allow[ed] everyone to have equal access to the guest” (Varvel, 2001, para. 10). Use of a guest “expert” interacting in an online class enhanced the professional development of special education needs coordinators by emphasizing the participants as “members of a community of practitioners” (Wearmouth, Smith, & Soler, 2004, p. 91). Social work course instructors were able move beyond local geographical limitations to find “the best speaker to stimulate the topical interest and needs of the students” in the online synchronous classroom (Sage, 2013, p. 386).

As online course management systems have become more user-friendly, pedagogical benefits have increased. In an undergraduate bilingual teacher preparation program, Ostorga and Farruggio invited a guest author/speaker into the asynchronous class discussion to help students discover the author’s “perspective on what they saw as inconsistencies between the field experiences and the course readings” (2013, p. 2147). As noted in one business course utilizing a social constructivist pedagogy, the guest speakers’ input helped improve “credibility of the course materials” (Eveleth & Baker-Eveleth, 2009, p. 420). Comparing two guest speaker experiences in an online instructional technology graduate course, Hemphill and Hemphill (2007) concluded that frequent guest speaker postings on asynchronous discussion boards were not necessary; as long as the postings were oriented toward higher-order thinking, they encouraged higher-level student responses. An additional benefit includes the opportunity for students to review transcripts to draw connections among other course materials.

Within the library and information science setting, Rowell and Guistini (2008) have used guest speakers to add variety to course material within a constructivist- and problem-based-learning-oriented health librarianship course; speakers included a number of former students who had moved on to health librarianship positions. A recently graduated vendor has reflected on her experience as a guest lecturer in an MLIS class to address students’ apprehension about working with vendors (Apostol, 2007). The use of guest speakers or lecturers in the LIS setting has otherwise received little attention in the literature. The current study seeks to add to existing literature on guest lecturers in the LIS and other disciplinary online courses.

Methodology

A Qualtrics survey was devised which principally sought to ascertain the status of MLIS course instructors (full-time MLIS Professor vs part-time Adjunct Professor), the nature of classes using guest lecturers, reasons for using guest lecturers, perceived levels of satisfaction with guest lecturers, and inclination to use guest lecturers in future classes. IRB approval for the research was obtained from Valdosta State University and James Madison University. The Qualtrics survey was distributed to the email addresses of course instructors currently teaching in ALA-accredited 100% online MLIS programs, identified by consulting the Directory of ALA Accredited and Candidate Programs in Library and Information Science, along with publicly available information from the websites of institutions offering MLIS degrees.

Results

Responses were obtained from 87 participants, 78 of whom returned sufficient data to allow for analysis. At time of writing (March 2018) the survey remains open and continues to garner responses. Data will continue to be collected in accordance with IRB parameters, and may be used for possible, future research, comparing online use of guest lecturers to the role of guest lecturers in the face-to-face classroom. Approximately 100 hundred emails sent to subjects yielded “vacation” messages or email “bounces.” The response rate for the research, as reported in this paper, was 9.1%.
Quantitative Data

Table A.  
Classes Taught and use of Guest Lecturers

<table>
<thead>
<tr>
<th>Classes taught</th>
<th>Full-time faculty</th>
<th>Part-time faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 2</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>3 to 6</td>
<td>41</td>
<td>6</td>
</tr>
<tr>
<td>7+</td>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guest lecturers used in classes?</th>
<th>Full-time faculty</th>
<th>Part-time faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42</td>
<td>12</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of classes involving guest lecturers</th>
<th>Full-time faculty</th>
<th>Part-time faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least one</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Some</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>All</td>
<td>13</td>
<td>4</td>
</tr>
</tbody>
</table>

Table B.  
Nature of Classes Involving use of Guest Lecturers

<table>
<thead>
<tr>
<th>Class topic area</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Services / Reference</td>
<td>41</td>
</tr>
<tr>
<td>Archives &amp; Special Collections</td>
<td>12</td>
</tr>
<tr>
<td>Public Libraries</td>
<td>12</td>
</tr>
<tr>
<td>Digital Libraries or related initiatives</td>
<td>11</td>
</tr>
<tr>
<td>Management</td>
<td>6</td>
</tr>
<tr>
<td>Technical Services / Metadata</td>
<td>6</td>
</tr>
<tr>
<td>Collection Development</td>
<td>5</td>
</tr>
<tr>
<td>Foundation (introduction to library science)</td>
<td>5</td>
</tr>
<tr>
<td>School Libraries</td>
<td>5</td>
</tr>
<tr>
<td>Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: For the purposes of Table B, classes that contained two or more identified themes, for example, “Public Library Management,” were coded by all appropriate identifiers (“Public Libraries” and “Management”).

Figure A.  
Whether Guest Lecturer Involvement with Classes was Synchronous, Asynchronous, or Both Synchronous and Asynchronous
Professional Librarians as Guest Lecturers

Participant responses indicated that 70% of the guest lecturers described in this research were professional librarians, with the other 30% of guest lecturers pursuing other careers. The professions (other than librarian) mentioned most frequently were representatives of publishers or vendors and IT specialists.

Levels of Satisfaction with Guest Lecturer Contributions, and Likelihood of using Guest Lecturers in the Future

All participants indicated satisfaction with the work of guest lecturers, stating that the guest lecturers had “significantly” or “somewhat” enhanced the instruction, with 100% of participants who reported recent use of guest lecturers indicating a willingness to use guest lecturers again.

Qualitative Data

Qualitative data was sought in four key areas:

- Reasons guest lecturers were not used (a question asked of respondents who reported not using guest lecturers)
- Motivations for using guest lecturers (a question asked of respondents who reported using guest lecturers)
- Positive attributes the guest lecturers brought to instruction
- Problems or concerns with guest lecturers

For reasons of brevity, the first and second most frequently codified response for each of these categories is reported:

Reasons why Guest Lecturers were Not Used:

1. Technological concerns
2. Scheduling concerns

Motivations for Using Guest Lecturers:

1. Adding a practicing librarian’s perspective to the class
2. Adding another professional’s perspective to the class (examples include publishers’ representatives, copyright experts)

Positive Attributes:

1. Connecting students to working professionals in the profession the students aspire to join
2. “Variety” – an alternative to the usual course instructor adds interest to the class; practitioners offer a change from theoretical perspectives

Problems or Concerns:

1. Technology issues – problems with ensuring student access to the guest lecturer’s contribution to the class
2. Scheduling/time commitment concerns – issues with synching the guest lecturer’s contribution to the class with the class schedule; concerns about placing an undue burden on guest lecturers

Discussion

Among full-time MLIS faculty respondents, 25% of respondents reported an unwillingness to include guest lecturers in their teaching, compared to 45% of respondents who are part-time adjunct faculty. One possible reason for this difference is that adjunct faculty who participated in the research overwhelmingly indicated that they were, themselves, practicing librarians, or working in a related field (Media Curator or Information Architect). The practitioner might not need to bring another practitioner’s perspective to class, but the issues of variety and alternative viewpoints referenced in the qualitative data suggest that adjunct faculty may wish to think more broadly.
when considering possibilities for guest lecturers: could this be a good opportunity to include professionals from outside librarianship?
Well over one third of the classes focused upon public services or reference work. This fact did not surprise the authors (as Reference Librarians, they are experienced in guest lecturing or serving as embedded librarians). The high frequency of archives-related classes is also unsurprising. Archivists may be seen to represent a profession within a profession in terms of librarianship; this situation likely results in professional Archivists being welcomed as guest lecturers in related classes. Something which is notable, however, is the low frequency of classes addressing technical services. The authors can offer no explanation for why the elements of librarianship involving cataloging and metadata are not better represented in the research data.

The qualitative data, taken in conjunction with the high number of classes limited to asynchronous guest lecturer involvement, suggests that concerns about technology continue to provide a barrier to including guest lecturers, or limit the guest lecturer’s participation to discussion boards or other asynchronous contact with students. Common responses included sentiments such as difficulty “overcoming the technological hurdles when providing access to the guest and the time required to clarify the means of delivering the guest lecture,” and “I find the logistics of providing guest access to the system challenging.” It seems that problems with guest lecturer access to learning management systems may be preventing course instructors from using guest lecturers as a resource, which seems unfortunate, given the positive response to guest lecturers described earlier.

Conclusions

Those course instructors who regularly use guest lecturers greatly appreciate the guest lecturers’ work. Further work may be necessary to understand whether barriers and limitations to guest lecturer involvement are unique problems for online learning, or also cause difficulties in the hybrid learning environment. In the interim, the authors of this paper encourage course instructors contemplating the inclusion of guest lecturers to partner with colleagues in their institutions with expertise in, and responsibility for, learning management systems. Institutional questions and technical problems with an LMS or related technology ought not to preclude students from benefitting from the pedagogical enhancements guest lecturers may add to a class.

References


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Price vs. Cost of Distance Education Enrollment

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Abstract

The true cost to deliver quality online programs has been both complex and challenging. Early on, distance education was thought to be a cheaper alternative than face to face (Bart, 2008). However, high startup costs for course development and infrastructure combined with higher than expected variable costs for course and technology updates has complicated this concept (Bart, 2008; Poulin & Taylor Straut, 2017). Given this, the researcher hypothesized that institutions with higher online enrollments experience lower institutional revenues per FTE and higher instructional expenses per FTE. Using the Integrated Postsecondary Education Data System (IPEDS), the researcher studied the reported instructional expenses per FTE and institutional revenues per FTE at large, public institutions during the 2012-2015 reporting periods. Resulting data demonstrated that institutions with higher online enrollments experience lower institutional revenues and lower instructional costs per FTE.

Introduction

As more non-profit institutions add online learning to their educational delivery format, pricing becomes essential. In most instances, the tuition online students pay is the same as their face to face counterparts. Yet, distance education initial costs are high (developing instructional materials, technology infrastructure, accessibility, etc.), and ongoing variable costs are substantial (delivery system costs, course updates, infrastructure, etc.). Therefore, despite parallel tuition costs, many institutions require a technology fee for their online learners that could be as high as $150 per online course (Poulin & Taylor Straut, 2017). Despite the high startup and maintenance costs, online education has the potential to benefit from the economy of scale – no classroom size and overhead of maintaining physical structures. For example, in 2013 Georgia Tech welcomed its first cohort into the fully online master’s degree program in computer science. With a partnership with Udacity and support from AT&T, initial projections pointed to 10,000 students enrolled and a profit of over $4 million within the first three years. Those projections proved to be overly optimistic (Straumsheim, 2016). The hope was that aggressive pricing would attract enormous amounts of learners, which did not matriculate as planned. Furthermore, MOOCs are not only expensive to produce, but often have a weak pedagogy and completion rates are low (Haynie, 2014). The research done by Poulin and Taylor-Straut (2017) might very well sum up the research in this topic – data regarding pricing is all over the map, as well as actual published prices. The purpose of this research study was to collect longitudinal data regarding distance education enrollment growth over time as compared to overall institutional revenues and instructional expenses.

Method

Data was collected from the Integrated Postsecondary Education Data System (IPEDS -https://nces.ed.gov/ipeds/) for this study. Data files from large public institutions with enrollments above 10,000 were included in the original data set.

The following variables were chosen for 2012, 2013, 2014, and 2015:

Independent Variable:
- Fall 2012-2015 - Students enrolled in some but not all distance education courses (All students total)

Dependent Variables:
- 2012-2015 Revenues from tuition and fees per FTE (GASB)
  - Defined as: Revenues from all tuition and fees assessed against students (net of refunds and discounts and allowances) for educational purposes. If tuition or fees are remitted to
the state as an offset to the state appropriation, the total of such tuition or fees are
deducted from the total state appropriation and added to the total for tuition and fees.

- 2012-2015 Instruction expenses per FTE (GASB)
  - Defined as: General academic instruction, occupational and vocational instruction,
    community education, preparatory and adult basic education, and regular, special, and
    extension sessions. Also includes expenses for both credit and non-credit activities.
    Excludes expenses for academic administration where the primary function is
    administration (e.g., academic deans). Information technology expenses related to
    instructional activities if the institution separately budgets and expenses information
    technology resources are included (otherwise these expenses are included in academic
    support).

Research Questions:

1. Is there a statistically significant difference in Revenues from Tuition and Fees per FTE for institutions
   with lower distance education enrollment vs higher distance education enrollment?
2. Is there a statistically significant difference in Instruction Expenses per FTE for institutions with lower
distance education enrollment vs higher distance education enrollment?

Data Analysis

IPEDS delivered 146 institutions, which was further reduced after removing institutions with blank data. Because
the study focused on distance education enrollment impact on revenues and instruction expenses, the data was
manipulated to run the following statistical tests: simple regression analysis, t-tests, and single factor ANOVA. The
data set was divided into four different year categories and then institutions with blank data were removed. After
data clean up, n=142 for 2015, n=142 for 2014, n=141 for 2013, and n=139 for 2012. For t-tests, two groups per
year group was created based on DE enrollment – those with the highest DE enrollment, and those with the lowest.
The range of institutions in each DE group ranged from n=42-66 based on natural breaks in the DE enrollment for
each year group. For single factor ANOVA analysis, DE enrollments were categorized into three levels of
enrollment groups (1, 2, 3). Years 2015, 2014, and 2013 had 20 institutions for each ANOVA group, and the 2012
data had 14 institutions in each group. Data analysis also included scatterplot charts with trend lines, and a simple
regression analysis.

Results – Research Question #1

Three statistical tests were conducted using the independent variable (DE enrollment) and the dependent variable,
revenues from tuition and fees: (1) Two-Sample t-Test Assuming Unequal Variances, (2) Single Factor ANOVA,
and (3) simple regression analysis. The t-Test demonstrated a statistically significant difference in all four year
groups studied among the low DE enrollment group vs the high DE enrollment group. On average, the high DE
enrollment group had revenues about $2300 less per FTE across all year groups. Therefore, the null hypothesis that
there was no statistical difference was rejected.

Table 1.

<table>
<thead>
<tr>
<th>Instructional Revenues Per FTE 2015</th>
<th>Instructional Revenues Per FTE 2014</th>
<th>Instructional Revenues Per FTE 2013</th>
<th>Instructional Revenues Per FTE 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low DE 10966.43</td>
<td>Low DE 10178.60</td>
<td>Low DE 9749.287</td>
<td>Low DE 7252.421</td>
</tr>
<tr>
<td>High DE 636</td>
<td>High DE 8250.507</td>
<td>High DE 8004.696</td>
<td>High DE 10283.26</td>
</tr>
<tr>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Low DE 8250.507</td>
<td>Low DE 10178.60</td>
<td>Low DE 8004.696</td>
<td>Low DE 7252.421</td>
</tr>
<tr>
<td>High DE 636</td>
<td>High DE 8250.507</td>
<td>High DE 8004.696</td>
<td>High DE 10283.26</td>
</tr>
<tr>
<td>Variance</td>
<td>Variance</td>
<td>Variance</td>
<td>Variance</td>
</tr>
<tr>
<td>Low DE 1315238</td>
<td>Low DE 1337617</td>
<td>Low DE 1191788</td>
<td>Low DE 1085593</td>
</tr>
<tr>
<td>High DE 6.25</td>
<td>High DE 5.04</td>
<td>High DE 3.63</td>
<td>High DE 0.15</td>
</tr>
<tr>
<td>Observations</td>
<td>Observations</td>
<td>Observations</td>
<td>Observations</td>
</tr>
<tr>
<td>Low DE 55</td>
<td>Low DE 66</td>
<td>Low DE 66</td>
<td>Low DE 57</td>
</tr>
<tr>
<td>High DE 69</td>
<td>High DE 57</td>
<td>High DE 56</td>
<td>High DE 42</td>
</tr>
</tbody>
</table>
The two following analyses – single factor ANOVA and regression analysis showed a minor negatively correlated trendline between DE enrollment and revenues in all four year groups. The ANOVA test showed a statistically significant difference in the means of three different DE enrollment groups across all four years studied. Specifically, as enrollment grew, institutional revenues per FTE lessened. The regression analysis also showed a significant negative correlation among all four year groups, however the R square value was low in all cases.

Table 2.

Three statistical tests were conducted using the independent variable (DE enrollment) and the dependent variable, instruction expenses per FTE: (1) Two-Sample t-Test Assuming Unequal Variances, (2) Singe Factor ANOVA, and (3) simple regression analysis. The t-Test demonstrated a statistically significant difference in three out of four year groups studied among the low DE enrollment group vs the high DE enrollment group. On average, the high DE enrollment group had instruction expenses about $3300 less per FTE across all year groups. Therefore, the null hypothesis that there was no statistical difference was rejected for three out of the four years studied.
### Table 3.

<table>
<thead>
<tr>
<th>Test: Two-Sample Assuming Unequal Variances</th>
<th>Instructional Expenses Per FTE 2015</th>
<th>Instructional Expenses Per FTE 2014</th>
<th>Instructional Expenses Per FTE 2013</th>
<th>Instructional Expenses Per FTE 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low DE</td>
<td>High DE</td>
<td>Low DE</td>
<td>High DE</td>
<td>Low DE</td>
</tr>
<tr>
<td>Mean</td>
<td>13771.81 (818)</td>
<td>9452.028 (986)</td>
<td>12507.07 (576)</td>
<td>9584.140 (351)</td>
</tr>
<tr>
<td>Variance</td>
<td>5721268 (4.26)</td>
<td>1346252 (6.65)</td>
<td>4453555 (3.39)</td>
<td>1772707 (5.34)</td>
</tr>
<tr>
<td>Observations</td>
<td>55</td>
<td>69</td>
<td>66</td>
<td>57</td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>df</td>
<td>74</td>
<td>111</td>
<td>120</td>
<td>64</td>
</tr>
<tr>
<td>t Stat</td>
<td>3.886595 (593)</td>
<td>2.943938 (144)</td>
<td>1.968836 (317)</td>
<td>-</td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>0.000109 (832)</td>
<td>0.001973 (763)</td>
<td>0.025638 (467)</td>
<td>0.000121 (31)</td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.665706 (893)</td>
<td>1.658697 (265)</td>
<td>1.657650 (899)</td>
<td>1.669013 (025)</td>
</tr>
<tr>
<td>P(T&lt;=t) two-tail</td>
<td>0.000219 (665)</td>
<td>0.003947 (526)</td>
<td>0.051276 (934)</td>
<td>0.000242 (62)</td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>1.992543 (495)</td>
<td>1.981566 (757)</td>
<td>1.979930 (405)</td>
<td>1.997729 (654)</td>
</tr>
</tbody>
</table>

Two additional analyses, regression analysis and a single ANOVA, were also conducted. The initial scatterplot showed a minor negatively correlated trendline between DE enrollment and instruction expenses in all four year groups. The ANOVA showed a statistically significant difference in the means of three different DE enrollment groups across three of four years studied. Specifically, as enrollment grew, instruction expenses lessened. The regression analysis also showed a significant negative correlation among all four year groups, however the R square value was low in all cases.

### Table 4.

![Scatterplot of Enrollment (Y) Vs. Instructional Expenses (X) 2015](scatterplot.png)

\[
y = -0.3323x + 12969 \\
R^2 = 0.0548
\]
Discussion and Conclusion

Distance education is not going away (Dimeo, 2017). The benefits to students are profound: increased access, improved learning and interaction, flexibility, speed of delivery, self-paced, and increased quality of teaching. Academic exchange in interactive online spaces allows learning to take place without credence to space or time and speaks to the way the next generation is demanding their education to be delivered. The results of this study determined that higher online enrollments reduce institutional revenues per FTE. The correlation is mild due to high variances among the institutions in this study. Potential revenue seems to be complicated by unapprised pricing, year over year change in cost structure, and evolving infrastructure maintenance. Administrative and academic challenges regarding online education further confounds pricing. Online delivery adds the demand for technical services, involves a shift in pedagogy and assessment, requires careful planning for accessibility and academic integrity, and introduces new quality assurance models that must be developed. It may be several more years before a verifiable pattern emerges.

Many administrators scoff at the impression that employing online technology reduces instructional costs (Lei & Gupta, 2010); however, the results of this study seem to demonstrate that institutions with high online enrollments do indeed have lower instructional expenses per FTE. However, true instruction expenditures could be absorbed in other ways and not reported to IPEDS in a centralized way, which could be a limitation to this study. Additionally, since IPEDS reporting of distance education enrollment only began in 2012, revenues at institutions with high online enrollments have not risen on the same scale as institutions with relatively low online enrollments. Because this study found that instruction expenses were indeed lower in institutions with high online enrollments, this could be because of the way this data is accounted for and reported to IPEDS. IPEDS may still be refining their reporting model to capture this type of information. Or, it could be that IPEDS is not the designee to differentiate these types of expenses. As online delivery grows and initial overhead is well behind us, the cost to deliver these programs will lessen, and by then institutions may see a reduction in the cost structure (Hanover Research, 2011). The question is – when will that happen, and will those cost savings be passed on to students?

The financial operations of higher education institutions are complex and opaque – institutional revenues come from various sources such as state and federal government, alumni donations, sports, etc. (Lei & Gupta, 2010). Different philosophies and technologies in how to teach distance education have an enormous impact on price and cost, so there will continue to be substantial variation in this research. However, as much of the research contends - regardless of resources - institutions that are aimed at growing online enrollment should fundamentally be focused on student access and growing student markets, rather than continuously finding ways to reduce costs (Wang, 2015). The solution may lie in the triad of increasing access, improving quality, and managing costs.

References


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Working Backwards Moves You Forward: Informed Data Collection

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Abstract

The official mission of Kentucky’s statewide Enhancing Programs for IT Certification (EPIC) grant was to improve and expand the current Learn on Demand offerings within the Computer and Information Technologies and Medical Information Technology programs, with an emphasis on serving TAA-eligible workers, veterans, the unemployed, the underemployed, and low-skilled/underrepresented workers. As we began, we put most of our energy into developing courses and recruiting participants, assuming the data would just fall into place. We soon realized it wasn’t that simple. All aspects of the grant would have gone smoother if we had devoted that same attention to data collection and analysis. Living this process, we learned that it is best to work backwards when planning data collection, entering the data, and conducting data analysis to ensure that all reporting requirements are met and success is optimally quantified.

Introduction

The programmatic objectives of developing courses and recruiting students were the main focus of the first year of our three-year grant. We assumed that data collection would flow organically from these products, but as we entered year two, we found this was not the case. As we look back and plan to move forward, we will share our greatest challenges and lessons learned in regards to data planning, entry, and analysis.

Planning

Within the scope of work and the reporting requirements from the granting body, certain data points are outlined. Each college was also aware of local expectations for data collection. In attempting to understand what each of these items truly meant, we did not map how each data definition influenced other elements and failed to anticipate how this could negatively impact our final results. We believed we had a comprehensive understanding of these reporting requirements, but we later discovered that terms such as “participant” and “completer” can have one meaning within a community college system and another within the granting body. For example, after clarifying our definition of “participant” after the first year, we were able to count more students which satisfied goal numbers in one area; however, we failed to trace how these new participants would not always be counted as “completers,” creating the illusion of poor performance on other metrics. As we approach the end of the grant, we have struggled to quantify the success of all EPIC students.

Looking back, we should have formed a committee chaired by the data analyst with the task of examining grant objectives, local data needs, and all data elements required by every reporting agency. This committee would have been able to create operational definitions, map how each element relates to others, and determine how to best collect data to satisfy the reporting requirements. Personnel from other grants should be invited to early meetings to share their successes and challenges. Each project is unique, so their experiences should not take the place of doing a full data analysis based on your individual grant.
Though it is extremely challenging to visualize how all data elements will come together to satisfy reporting requirements, this vital process must be completed before beginning course development or student recruitment to avoid collecting too much, too little, or erroneous data. Informed data collection and analysis are the foundation of successful projects, empowering you to collect information in the background while the primary objectives are fulfilled.

Within any organization, data is collected for multiple purposes. Our second lesson learned is to keep the reporting requirements in mind while examining preexisting data sources within your organization. Utilizing established data sources can reduce workload, while potentially eliminating common errors like duplicate, inconsistent, or missing data. If reports are available in an electronic format, it may also reduce the need for manual data input into a separate system. As important as it is to know what your organization can share with you, it is more important to know what they cannot. If you do not have access to necessary data, you must create a mechanism to collect it.

From the beginning, we knew there would be a lot of data to collect and analyze—selecting a database management system seemed like the logical first step. In hindsight, we were trying to find a system to manage data before we fully understood what information would need to be collected. Our third lesson learned is to wait until elements are defined, relationships are mapped, and existing data sources are evaluated before seeking an additional information system. To determine if it is better to build your own database or purchase the services of a vendor, consider the time and talent available from grant and institution staff, the capabilities of existing electronic data sources, and the cost of purchasing a system. Within our grant, we purchased a turnkey system that did not map directly to our needs. This led to confusion regarding data entry and analysis, manifesting in the manual entry of data that was already available electronically. If we had waited, we would have likely still needed to purchase the system, but we would have been a better-informed customer.

Changes will happen within the life of a grant or any project, but by clearly defining terms and mapping how each element impacts the others from the beginning, personnel can quickly identify what may impact data collection and analysis.

Data Entry

With our grant, various personnel were charged with entering data. Data training suffered from many of the same pitfalls as our planning issues. Because of our limited understanding of the interworking of the data elements, we were unable to provide optimal training.

Data entry and related training should not begin until all aspects of the data plan are complete. This was a lesson we learned too late, but our misstep came from a good place. The grant had created classes and recruited participants—there was a strong desire to show these early successes in a quantitative manner. If a thorough review of data elements had been completed before students were recruited and the courses were offered, showing this success would have been quick and easy.

Within the grant, personnel have varying levels of data literacy and diverse professional experiences; a one-size-fits-all training plan did not work. A comprehensive data dictionary listing definitions and relationships should be created as the initial review of data items is completed. This dictionary should be written with adjusted terminology to fit the baseline knowledge of the staff and shared with everyone. Circulating this document will give everyone a view of the big picture, but with optimal training, fully understanding the complexities of related elements is not vital to successful data entry.

A detailed and complete data entry manual should have been produced before any information was entered. We learned that producing individual instruction sheets for each form and function prevented staff from conceptualizing our data as a whole and led to inconsistencies between related procedures. By writing the manual as a single document, a definitive plan could have been shared. Creating a timeline containing key reporting deadlines, deliverable due dates, and other critical data dates would have also assisted staff in understanding how individual elements fit together.

A manual cannot take the place of in-person training, and we learned that group training is not always successful because of various professional backgrounds. Looking back, a better strategy would have been visiting each of the six colleges that made up our statewide consortium to train college personnel individually. The data analyst should
also personally train any new staff who come onto the grant. This would require extra travel and more work at the front end, but it would also establish the analyst as the point of contact and the authority on data. Establishing this relationship would have helped with error checking and meeting deadlines while also reducing confusion.

Any process that involves people will have an element of human error. As part of data entry procedures, mechanisms must be developed to ensure data integrity. A plan for error checking needs to be created at the same time as the data entry instructions. This process should involve system generated performance reports as well as preliminary trend analysis to spot anomalies. We started error checking in the second half of the grant. Since error reporting was not a regular procedure in place since the beginning, some interpreted it as a critique of their efforts, rather than seeing it as a necessary practice to ensure the accuracy of the data. By introducing error checking earlier in the project, additional training can be initiated if necessary and simple typos will be fixed quickly. Regular communication also proves instrumental in ensuring data integrity. When every college is receiving an error report each week, it is not received negatively; it is just a routine part of the process.

Analysis

Raw data can be interpreted many ways and not always correctly. Each college had the ability to pull reports from our database to share with their administration. Without a full understanding of how the reports are created and what each data element means, the administration at some consortium colleges erroneously felt the grant was not meeting early benchmarks. While the EPIC project leads at each college had been trained on data definitions, they did not have the depth of knowledge to answer all questions.

The analyst does not need to pull all reports or meet with college administrators personally, but grant leadership should rely on their expertise. Grant staff should also list the data analyst on reports as a resource in case of additional questions. The analyst must be the authority for interpreting data to ensure that accurate information is being translated for administrators and other stakeholders.

Conclusion

Successful data collection and analysis can be compared to building a house. If you have a detailed blueprint before you cut the first piece of wood or drive the first nail, you will have a sturdy structure created with optimized labor and materials. With data, it is equally important to have an explicit, precise, and actionable plan. In the case of the EPIC grant, we have built a strong structure with which we can gather and analyze data, but it took more time, talent, and resources than would have been needed. Looking backwards at the data needs before starting to move forward ultimately cultivates student success and enables educational programs to adhere to a commitment of excellence from inception to conclusion.

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Online Higher Education Executives: 
A Comparative Analysis of Job Vacancy Postings and Competencies Identified in the Literature

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Abstract

Higher education leaders must have knowledge in diverse areas including accreditation, budgeting, fundraising, instruction, human resource management, governance, and assessment. Over the past two decades, online leadership proficiencies have emerged as a new key knowledge area in higher education. To close this knowledge gap, many institutions have developed a role for an Online Learning Executive. This study included a comparative analysis of the job requirements outlined in vacancy postings for this position and a review of the skills outlined as necessary in the literature on higher education leadership. A comparison of needed skills and desired skills outlined in job postings allowed the researchers to identify key gaps of leadership skills missing from many job postings. Data were gathered from 41 job postings collected over a nine-month period in 2017 and an analysis of the literature of higher education leadership skills, relative to online executives. The comparison resulted in an identification of overlooked leadership competencies including advocacy, marketing, growth promotion, promoting student success, engagement, instructional design skills, and resource allocation knowledge. Future researchers should interview leaders in these online positions to evaluate which of these skills are actually required in the daily operation of the institution’s online program.

Keywords: online leadership, higher education leadership, distance education leadership

Higher education leadership requirements have expanded over the past two decades with the introduction of online education. With the shift to distance or online offerings across most institutions, the need to ensure higher education leaders have necessary skills to support online growth is paramount. The purpose of this comparative analysis was to identify the job skills outlined in vacancy postings for senior level positions overseeing an institution’s online education activities. Depending on the size of the institution, this role is known by diverse titles including Chief Online Executive, Distance Education Dean, Director, Program Director, and Vice Provost or President of Online Education, among others. For the purposes of this study, we will call this positng an Online Learning Executive (OLE). Regardless of title, this study included skills denoted as hiring criteria for the senior-most academician charged with overseeing the online offering across a wide swath of institutions including for-profit and not-for-profit colleges and universities, state institutions, private colleges and universities, and land grant institutions.

The degree to which institutions develop leadership talent is among the most reliable measures of academic excellence (Sweitzer, & Volkwein, 2009). Given the emergence and expansion of online education at all levels, ongoing evaluation of leadership needs is critical (Meyer & Murrell, 2014). Online education represents the fastest growing sector of higher education (Allen & Seaman, 2013). As university leaders struggle to respond to market forces and adapt to new technological contexts, they face the challenges of maintaining academic quality and credibility (Allen & Seaman, 2013) and effective leaders are needed to navigate these tasks.
The problem identified in this study was the absence of an understanding of the needed competencies for OLE. A comparison of the current literature relative to online leadership skills and abilities for distance education leaders and an evaluation of the skills outlined in current OLE job postings allowed for a comprehensive profile of required skill gaps in this growing area of higher education. The purpose of this study was to conduct a qualitative comparative analysis of skills outlined for senior online higher education leaders and the skills identified in job vacancy postings for this role.

The research questions undergirding this study were:

1. What are institutional expectations for skills of OLE as identified in job postings?
2. What are OLE leadership skill requirements as noted in the literature?
3. What differences exist between institutional expectations of OLE skills and skills outlined as necessary in the literature?

Theoretical Framework

The contingency leadership theory was developed by Fiedler (1966). This theory is based on the idea that there is no one right way of leading and that leadership skills required are dependent on context. Further, Fiedler (1966) asserted that certain leaders perform optimally under certain contexts, but not others. In Fiedler's contingency theory, effective leadership depends not only on leadership style, but also on the ability to control the leadership situation. As such, this theory fits well with the emerging skills and areas of control needed for effective OLE.

Literature Review

Herron, Lashley, Salley, and Shaw (2016) noted there is a need for senior leadership with an understanding of trends, strategic demands, technology, and curriculum to promote the expansion and support of online education within an institution. While many senior leaders within an institution may possess generalized knowledge in these areas, a specialist who can focus exclusively on the online cache is necessary for effective management and operation. The Online Learning Executive (OLE) role is distinct from that of Chief Information Officer, who focuses often on the procurement and process of technology. In contrast, the OLE’s focus must be on student access, online delivery, digital engagement, technology, and strategy in alignment with institutional mission and vision (Beaudoin, 2003; Marcus, 2004). This leader may emerge from a variety of academic and professional backgrounds but will share a passion for higher education innovation (Herron, Lashley, Salley, & Shaw, 2016). Distance education leaders should be viewed as valued strategic partners promoting access and opportunity for student populations not fully tapped through traditional ground-based curricular offerings.

Online leadership differs from other higher education leadership (Nworie, 2012). OLEs must collaborate across the institution and require extended skillsets. Fredericksen (2017) identified some of these unique skills required. A majority of his study participants had 6-20 years of leadership experience, and 75% had taught online for at least a year. Two thirds of participants had more than a decade of leadership experience and more than six years of curriculum and instructional design experience. Finally, 60% had at least one year of IT experience (Fredericksen, 2017). His findings showed that many of the OLE positions had been created in the past six years. Participants in his study ranked top priorities for this position including faculty training and development, online strategic planning, and staffing for faculty support and instructional design, marketing and promotion of online offerings, funding, and resource allocation.

Higher education leaders face increasing challenges in today’s learning environment including changing student demographics, funding uncertainties, and growing demands for accountability (Davis et al., 2015). Moreover, the growing need for ongoing assessment and restructuring of academic programs and services to meet the changing demands of the workplace is a major challenge for 21st-century leaders (Plinske, 2008). Determining the qualifications and ideal characteristics of an OLE is an important part of the candidate selection process (Bornstein, 2010; Channell, 2013). Effective selection of a candidate requires a keen understanding of the essential leadership competencies including organizational strategy, communication, resource management, collaboration, advocacy, and professionalism (de la Teja, 2010).

Eddy (2010) and Davis et al. (2015) provided a template of skills needed by higher education administrators and executives. These skills include strategic planning skills, resource management, funding and fundraising, excellent
communication, and technology skills. Royer and Latz (2015) added the institution’s historical mission as an important leadership focus. The Academic Council on Education (n.d.) and Todd (2014) and noted that academic leaders are required to oversee academic vision, accountability, accreditation, strategic planning, supervision/management, faculty advocacy, budgeting, and enrollment management. These leadership skills and competencies are well documented in the literature for successful higher education leadership in the 21st-century; yet a dearth of literature persists around the skills needed for the OLE as a newly emerging position in the space.

Methodology

Comparative analysis is a qualitative design that allows researchers to replicate valid inferences through the interpretation and coding of textual material. Through a systematic evaluation of texts (job vacancy postings and the literature), qualitative data were gathered on skills required for senior online leaders. The researchers examined and coded job vacancy announcements gathered from institutional websites and online job boards. To ensure interrater reliability, a job description for a senior online executive was used and two researchers independently coded the various components of the job description, requirements, and expectations. To ensure reliability, the researchers classified the job description with 90% agreement. Using a method of structure analysis, skill types were reviewed and coded to classify specific leadership criteria based on the following: leadership, technology, personnel management, curriculum and instruction, education, relationship building, or other. Data were examined to determine if and/or how these skills were synthesized into job description requirements for OLEs. A total of 41 job descriptions were evaluated. The types and frequencies of leadership skills identified in job postings were noted. The themes that emerged were then compared to the skills identified in the literature review as requisite for effective online senior leaders within higher education.

There were two types of participant samples used in this study. First, institutions were identified with published, publicly available online senior leadership job vacancy postings. Second, the literature was treated as a sample for this research as a source for comparison of required leadership skills. These two types of participants were required to juxtapose institutional and literature-denoted expectations of OLEs.

A sample of 41 job announcements were collected from February to September 2017. A keyword search of the phrase “Distance Education jobs, Vice Provost of Distance Education, Vice Provost of Digital Learning, online education jobs” yielded a list of publicly available websites that included that phrase. Position descriptions were collected from the search results that were from identifiable higher education institutions. Additionally, position descriptions were also collected through convenience sampling of announcements posted on select higher education list-servs in which the researchers participated. Based on a leadership coding for skill types, themes were identified to represent a type of leadership skill in the vacancy posting. The same codes were used to identify skills outlined in the literature.

Results

The design used to answer the three research questions in this study was a comparative analysis. Institutional websites and job boards were reviewed to determine skills required for OLEs. These findings were coded and sorted into themes of leadership skills. Then, these themes were identified in the literature outlining job skills for OLEs. Based on the themes that emerged from these sources, the results were compared.

Research Question 1: What are institutional expectations for skills of OLE as identified in job postings?

For research question 1, 41 job postings were coded to identify themes in the skills/competencies required in OLC vacancy announcements. A total of 716 job requirements were reviewed and coded, and the following themes emerged from the analysis: education, relationship building, curriculum personnel, technology, and leadership. Education requirements were identified in 100% of the job description requirements and comprised 80 of the overall skills outlined in the vacancy postings. Education included items such as required doctoral degree, required terminal degree, master’s degree or higher, degree in education or a related field, or training required in instructional design and curriculum development.

Relationship building was identified in 100% of the job description requirements and comprised 202 of the overall skills outlined in the vacancy postings. Relationship building included items such as collaborating across
departments, developing external and internal partnerships, professional networking, and coordinating with academic units.

Curriculum was identified in 65% of the job description requirements and comprised 45 of the overall skills outlined in the vacancy postings. Curriculum included items such as being responsible for curricular evaluation and development, overseeing online course design, managing and improving curriculum, aligning curriculum with quality metrics and accreditation standards, and expanding online program offerings.

Personnel was identified in 75% of the job description requirements and comprised 81 of the overall skills outlined in the vacancy postings. Personnel included items such as holding faculty accountable, supporting training and development of faculty, establishing online advisory boards, overseeing online faculty, and conducting tenure and promotion reviews.

Technology was identified in 35% of the job description requirements and comprised 45 of the overall skills outlined in the vacancy postings. Technology included items such as using multimedia to communicate, overseeing software applications, exhibiting proficiencies in digital tools, and managing the learning management system. Leadership was identified in 100% of the job description requirements and comprised 263 of the overall skills outlined in the vacancy postings. Leadership included items such as providing academic leadership, serving as chief academic officer, managing and improving process, strategic planning, and driving the mission and vision.

The chart below captures the total number of times each of the themes were identified across all job vacancies.

Table 1.

<table>
<thead>
<tr>
<th>Job Description Skills Noted In All Postings</th>
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<tbody>
<tr>
<td>Education</td>
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<tr>
<td>Relationship Building</td>
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<tr>
<td>Curriculum</td>
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<tr>
<td>Personnel</td>
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<tr>
<td>Technology</td>
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<tr>
<td>Leadership</td>
</tr>
</tbody>
</table>

Research Question 2: What are OLE leadership skill requirements as noted in the literature?

As gathered and synthesized from the literature, the skill requirements for higher education leaders outlined in the literature included strategic planning, technology, curriculum, support, promoting growth, student success, online delivery, engagement, mission/vision development, collaboration, leadership, instructional design, faculty training and development, marketing, advocacy, funding, fundraising, resource allocation, communication, and professionalism.

Research Question 3: What differences exist between institutional expectations of OLE skills and skills outlined as necessary in the literature?

As noted in the literature review, the skills for OLEs are diverse. Based on the themes that emerged from the analysis of the job descriptions, a comparison was made to identify gaps in skills the researchers identified as essential. The chart below captures the leadership competency gaps. Across the top, the themes are identified and
down the side, the skills noted in the literature are captured. While advocacy and marketing were the only items that did not map directly to a theme, there were other skills that were not explicitly captured in the job descriptions including promoting growth of the online program, student success, engagement, instructional design, and resource allocation. Interestingly, education is not mentioned in the literature as a competency requirement, but was outlined in 100% of the job vacancies reviewed.

Table 2.

<table>
<thead>
<tr>
<th></th>
<th>Leadership</th>
<th>Technology</th>
<th>Personnel</th>
<th>Curriculum</th>
<th>Relationship Building</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Planning</td>
<td>X</td>
<td></td>
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<tr>
<td>Technology</td>
<td></td>
<td>X</td>
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<tr>
<td>Curriculum</td>
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<td>X</td>
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<td>Support</td>
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<td>X</td>
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<tr>
<td>Promoting Growth</td>
<td>X</td>
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<tr>
<td>Student Success</td>
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<tr>
<td>Online Delivery</td>
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<tr>
<td>Engagement</td>
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<td>X</td>
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<tr>
<td>Mission/Vision Development</td>
<td>X</td>
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<td>Collaboration</td>
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<td>Leadership</td>
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<tr>
<td>Instructional Design</td>
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<tr>
<td>Faculty Training/Development</td>
<td>X</td>
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<tr>
<td>Marketing</td>
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<td>Advocacy</td>
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<tr>
<td>Funding/Fundraising</td>
<td>X</td>
<td></td>
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<tr>
<td>Resource Allocation</td>
<td>X</td>
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<tr>
<td>Communication</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Professionalism</td>
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Discussion

It is hoped that this brief study will open a conversation about the gaps between institutional requirements outlined in OLE job vacancy postings and required leadership skills as determined in the literature. This gap can have profound consequences for mission fulfillment in terms of achieving effective leadership to oversee the online suite. While this study included a small sample of institutions collected over a single year, the researchers believe that this information may be transferable across institutions offering online degree programs. This study included a comparative analysis of institutional requirements for OLEs in comparison with identified leadership skills highlighted in the scholarship.
Advocacy and marketing were the only skills identified in the literature that did not map directly to a theme, but there were other skills that were not explicitly captured in the job vacancy postings, including promoting growth of the online program, student success, engagement, instructional design, and resource allocation. These skills should be more explicitly outlined in job postings to ensure OLEs have the diverse competencies needed to manage and lead in the online space. Because contingency leadership theory is grounded on a position that there is no one right way to lead, the unique work environment of the OLE allows for the application of best practices across a diverse field of leadership competencies required for the job. As education was the one theme that was identified in the job postings that did not map back to the literature of requisite skills; the researchers assert that professional development and formal academic learning are the ways that OLEs may develop needed competencies. It is unknown if education is correlated with positive online leadership, but this would be an interesting topic to explore more fully.

Conclusion

The OLE role is a senior leadership position requiring abilities in communication, innovation, technology, and leadership. With the growth of online offerings in higher education more institutions will recruit leaders able to fill the skills gaps spanning education and technology. Opportunities should continue to grow for those with online leadership skills. The gaps identified in this research should allow institutional leaders to thoughtfully craft job postings to hire the most capable and qualified individuals to support the future of online higher education.

Based on the findings, recommendations for further study include replicating this research across a broad swath of online institutions, exploring the relationship between online leadership efficacy and educational background, using a purposeful sample of experienced online leaders to ascertain the exact skills they use in their daily professional lives, and including interviews with non-online leaders to determine their proficiencies with online leadership skills. Finally, further research might include specific analytics measurements that can be used to identify leadership proficiencies in the online space.

References


Marcus, S. (2004). Leadership in Distance Education: Is It a Unique Type of Leadership – A Literature Review. *Online Journal of Distance Learning Administration, 7*(1).


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Using the Adult Classroom Environment Scale to Evaluate Learner Expectations

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Abstract

The purpose of this study was to utilize the Adult Classroom Environment Scale (teacher support, task orientation, student influence, affiliation, involvement, personal goal attainment, and organization and clarity) to explore adult learners’ preferences of the ideal online classroom environment in relation to their preferences of the ideal face-to-face classroom environment and to determine what, if any, differences of adult learners’ online classroom environment preferences related to common demographics (age, gender, and race). Adult learners reported wanting significantly more personal goal attainment in the ideal online classroom environment than the ideal face-to-face classroom environment. Female adult learners preferred significantly more organization and clarity, task orientation, and teacher support than male adult learners with regard to the ideal online classroom environment. White adult learners reported significantly higher ratings for affiliation than other adult learners based on preferences of the ideal online classroom environment. White adult learners preferred significantly more teacher support and organization and clarity than black or African American adult learners with regard to the ideal online classroom environment. No significant differences for adult learner preferences of the ideal online classroom environment were found with regard to age. Adult learner preferences of the ideal online classroom environment that were similar promote the use of similar design and facilitation practices for certain dimensions and avenues to implement differentiated instruction where preference differences were noted.

Overview

The overarching purpose of this study was to discover what elements students preferred for their ideal online classroom environment and how those preferences might differ from their desires of the ideal face-to-face classroom environment. Additionally, in this study we sought to understand what differences in an ideal online classroom environment might exist due to the common demographics of age, gender, or race. In order to best uncover those possible differences, the study was structured around the design of the classroom environment itself. It was decided early on to utilize the Adult Classroom Environment Scale (ACES) created and used by Darkenwald and Valentine (1986) since it was already established as a valid and reliable measure of the adult classroom environment in face-to-face settings.

The ACES was developed by Darkenwald and Valentine (1986) based on a need to assess the learning environment of adult learners. The final version of ACES consisted of seven measurement subscales: (1) teacher support, (2) task orientation, (3) student influence, (4) affiliation, (5) involvement, (6) personal goal attainment, and (7) organization and clarity (Darkenwald & Valentine, 1986). The seven subscales each had seven corresponding questions which together formed the 49 item survey that became the ACES. Darkenwald and Valentine created three nearly identical forms which only differed in instruction and intended respondent; one form instructed the student to respond based on their ideal learning environment, one based on their actual learning environment, and the final form instructed the teacher to respond based on their actual learning environment.

Once established, Darkenwald used the ACES in a variety of studies on adult education including research into how to enhance the adult learning environment, dropout rates, gender differences in classroom environments, and class performance (Beer & Darkenwald, 1989; Darkenwald, 1989, Darkenwald & Gavin, 1987; Darkenwald & Novak, 1997). Since it was shown to be a reliable and validated instrument for use in research on adult learners, many other researchers have used the ACES in their own studies, including but not limited to: Littlefield and Roberson (2005)
who used the ACES to measure the impact of feminist pedagogical strategies on graduate students in Social Work; Kelly and Bronstein (2003) who utilized the scale to study the impact of feedback folders on adult learners; and Freddolino and Sutherland (2000) who used the ACES to examine differences in student’s perceptions of the face-to-face classroom environment and their perceptions of the classroom environment provided at a distance via video based instruction.

The ACES’ seven dimensions seem to fall into two categories: (1) course design, which includes affiliation, involvement, personal goal attainment, and organization and clarity and (2) instructor facilitation, which includes task orientation, teacher support, and student influence. Each of these dimensions was found to be related to some aspect of online course design or facilitation and were each important in their own way (Ausburn, 2004; Freddolino, 1996; Jain & Jain, 2015; Kariuki, 1995; Ralston-Berg, 2014; Rao & Tanners, 2011; Singh, 2013; Tayebnik & Puteh, 2013; Wanner & Palmer, 2015). When looking at the different elements that make up a course, another aspect that researchers argued online courses needed to account for were possible differences in students’ preferences due to various demographic factors (Ashong & Commander, 2012). Often research on the demographic influences tended to focus on the three most common differences: age, gender, and race (Ashong & Commander, 2012; Ausburn, 2004; Garland & Martin, 2005). While there are other possible learner characteristics that could be connected to a difference in learners’ preferences, age, gender, and race seem to be particularly prevalent in research involving online learning (Ashong & Commander, 2012; Ausburn, 2004; Garland & Martin, 2005).

**Design and Procedures**

An inferential study was used with the independent variables of adult learner perceptions of an ideal face-to-face classroom environment as measured by the ACES, adult learners’ age, gender, and race, and a dependent variable of adult learners’ perceptions of an ideal online classroom environment as measured by the ACES. The population selected for the study was adult learners enrolled in at least one face-to-face and/or online course at Valdosta State University. Specifically, the participants of this study were n = 170 students whose age ranged from 18 to 69, with a mean age of 26.68 years. Of the n = 170 students, n = 134 students reported to be female, n = 34, reported to be male, and n = 2 students reported themselves as gender neutral or no gender. Additionally, n = 102 students self-identified as white, n = 53 students self-identified as black or African American, and the remaining n = 15 student selected another race or declined to provide an answer.

Students who volunteered to participate in the study accessed a link to an online survey of a slightly modified version of the ACES originally developed by Daarkenwald and Valentine (1986). The survey items were provided to participants with a four-point response scale which ranged from strongly disagree to strongly agree. Three questions were added at the end to collect the demographic data pertaining to age, gender, and race. This study utilized two versions of the survey; one asked adult learners to rate their ideal version of a face-to-face classroom and the other version asked adult learners to rate their ideal version of an online classroom. Participants took both versions, but the versions were in a random order.

**Ensuring Logical Progression in Content**

Paired samples t-tests and ANOVAs were used to analyze the following research questions:

1. Is there a significant difference between adult learners’ perceptions of an ideal face-to-face classroom environment and their perceptions of an ideal online classroom environment based on the ACES?
2. To what extent is there a significant difference between adult learners’ age (young adults ages 18-24, working-age adults ages 25-64, older adults ages 65 and older), gender (male, female, gender neutral/no gender), or race (white, black or African American, Other (American Indian or Alaska Native, Asian/Pacific Islander, Hispanic or Latino, Other)), and adult learners’ perceptions of an ideal online classroom environment as measured by the ACES?

**Results**

In terms of classroom environment differences, students’ ratings of personal goal attainment (t(169) = -9.04, p < .001) were significantly higher for their ideal online classroom environment than their ideal face-to-face classroom environment. The effect size (d' = 0.64) was found to be slightly higher than a medium effect (d’ = 0.50) (Cohen,
While there were no other statistically significant findings from the paired samples t-test, both affiliation (t(169) = -1.82, p = .070) and organization and clarity (t(169) = 1.86, p = .065) were close to statistical significance.

The ANOVAs run on the demographic data resulted in six significant findings. In terms of gender differences; female learners had significantly higher ratings for organization and clarity (F(2,167) = 3.81, p < .05), task orientation (F(2,169) = 3.46, p < .05), and teacher support (F(2,169) = 3.09, p < .05) than males did for their ideal online classroom environment. No significant differences were noted for student influence, affiliation, involvement, or personal goal attainment based on gender. In terms of racial differences, white learners reported significantly higher ratings on affiliation (F(2,167) = 3.91, p < .05) than Other adult learners and significantly higher ratings on teacher support (F(2,165) = 3.43, p < .05) and organization and clarity (F(2,167) = 4.46, p < .05) than black or African American learners. No significant differences were noted for task orientation, student influence, involvement, or personal goal attainment based on race.

Conclusion

The results of the analysis answered the two research questions. Even though only a few significant differences were indicated through the results, the results still help to serve as a guide to online course design and delivery. Perhaps more informative were the areas that did not show any significant difference (involvement, task orientation, teacher support, and student influence) as they are also able to shed light on where universal attention needs to be paid regardless of the type of classroom environment (online or face-to-face).

As students rated personal goal attainment more when envisioning an online course than they do when considering a face-to-face course and that suggests that when designing an online course, one should include more opportunities for personal goal attainment than they might in an equivalent face-to-face course. This is similar to the findings of Wanner and Palmer (2015) who discovered that students tended to highly value personalized learning opportunities. It is arguable that the lack of significant differences on the ACES could be perceived as a positive result as it reduces the number of differences instructors need to consider when moving from designing face-to-face classroom environments to designing online classroom environments.

In regards to demographic findings, the results showed few significant differences. Those differences that were present for gender, indicated female adult learners primarily rated items higher than male adult learners, and those present for race, indicated that white adult learners primarily rated items higher than black or African American and Other adult learners. Notably, no significant effects were found with regard to age. Based on this research, if your student population for an online course tends more toward female students, your online course design may need to focus more on organization and clarity and your facilitation needs to include more task orientation and teacher support than it would if your student population was mostly male. Additionally, your online course racial composite may impact the wants of your students with regards to organization and clarity, affiliation, and teacher support.

While not the comprehensive blueprint that would have been ideally generated through this research, these general guidelines serve to assist instructors who are new to the concept of designing or facilitating an online classroom environment. To that end, these initial guidelines will form as a foundation on which a larger model for online classroom environment design and facilitation can be further developed through additional research.

References


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Secret Boss Training:  
Get Everyone to Observe Online Courses

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Abstract

Many department chairs, tasked with observing and evaluating their faculty’s online teaching, have themselves never taught with technology. This white paper for distance-learning administrators is “secret boss training” that readers can share with their less tech-savvy administrative colleagues, so that online courses get observed at rates similar to face-to-face sections.

Introduction

At many institutions, part of the promotion-and-tenure process is a visit by the department chair to observe the teaching practices of a candidate faculty member. For example, at a large public university in the midwestern United States, the adoption of online courses posed a challenge for “observing” online teaching. In early 2017, a faculty member was getting his portfolio ready for the retention, tenure, and promotion process toward becoming full professor, and he had asked his department chair to observe his online course.

The department chair stopped by the Center for Teaching and Learning with a “quick question” for the technology coordinator: “We just need to know one thing. Our observation form has an item on it: ‘Instructor demonstrates enthusiasm.’ How can instructors demonstrate enthusiasm in an online course? After all, the students can’t see the professor or hear his voice.” It wasn’t a quick question to answer.

After some more conversation, the following four pertinent facts emerged:

1. This was the first time that anyone would be doing a formal administrative observation of an online course in the entire college. Even though the department in question had offered online courses for several years, they were not part of the regular peer- and administrative-observation cycle that was already set up for face-to-face courses. Like at many colleges and universities (Shelton, 2011), this university has a formal process in place for conducting retention, tenure, and promotion reviews. The steps in the process, format for submitted documents, and time line for observation and review are all delineated in university policy and the collective-bargaining agreement. However, each college and department has the flexibility to perform the tasks within the review process how they see fit.

2. Many years ago, the department had created an observation rubric for use by the department chair and peer reviewers when visiting classrooms, so that observers would ask the same questions from visit to visit.

3. The department chair had never developed or taught online courses himself, and the “enthusiasm” concern was the tip of the iceberg. He was unsure how many of the items on the department’s observation form might apply to online teaching. He was also skeptical whether some of the items from the form could even be observed at all, given the nature of an online course.

4. The faculty member had taught the course to be observed as a face-to-face course for many years, and the department chair had sat in on a 90-minute Thursday-afternoon session, some years back. The chair was concerned that he would not be able to estimate how much of the faculty member’s online course he should observe: “How much online is the same as ninety minutes?” The chair was also concerned that he would be able to see things in the online course that he could not observe in the face-to-face classroom. “So [the faculty member] has already e-mailed me his syllabus, his grading rubrics, his study guides, his lecture notes, and a whole bunch of other stuff. Do I have to read all of this in order to see his online course? Heck, should I read all of it? I don’t get to see that kind of stuff in the classroom.”
The department chair paused, and said “You know, to get down to the brass tacks, this whole thing used to take an hour and a half for me to sit in the classroom, and then another hour to type up my report. Now, I’m going to have to spend who knows how long reading and reading and reading before I even see the teaching happening, aren’t I?”

The technology coordinator suggested that they schedule a meeting at the end of the week to work together to get the department chair ready to perform the observation.

Administrators Today

The traditional model for face-to-face course observation is one where an administrator, typically a department chair, is responsible for visiting the classroom of an instructor in order to perform the evaluation. Although some department chairs and deans have taught online courses themselves (and thus have a feel for the challenges and flow of online teaching), many more administrators conducted their teaching careers exclusively in the face-to-face classroom. Especially for those administrators who moved away from teaching in the early 2000s, they are likely not to have developed or taught courses in a mode other than face-to-face (McCarthy & Samors, 2009).

The skeptic may speak up, here, to say that online teaching has been in existence long enough that most administrators will have had some first-hand experience with online teaching practices. The more likely situation is that administrators have not addressed the challenge of “what is good online teaching” until forced to do so, as in the scenario above with the department chair and review committee. Even when department chairs have taught online themselves, there is often a gap between their own teaching practices and the institutional processes in place for evaluating those practices. Further, institutions will find varying levels of administrative familiarity with online teaching methods from department to department.

The Elephant in the Room

There are purposes for evaluating online teaching that are largely apolitical: we evaluate our online teaching practices so that we can improve our teaching methods, retain students, and best support students in accomplishing their educational goals. Student, self, and peer evaluations—especially informal ones—fall into this category.

In the specific situation of administrators and their proxies observing and evaluating online teaching, evaluations typically performed in order to determine whether the instructor is re-hired for the following semester (in the case of contingent faculty) or whether the instructor progresses through the promotion-and-tenure process (for tenure-line faculty).

Because the purpose of administrative review is so narrowly conceived, many institutions have already created or adopted an administrator-observation instrument that is separate from peer- and student-evaluation instruments. For example, Columbus State Community College (2009) includes a “Faculty Online Observation Report” form as a separate instrument in its Faculty Promotion and Tenure Handbook. The form instructs administrators to indicate yes, no, or not applicable on observed elements of an online course.

Interestingly, the directions include some of the challenges of administrative observation of online courses:

- Perform the online observation jointly with faculty and collaborative reviewer(s).
- Provide information to help differentiate course design from faculty instruction.
- This observation is to review one lesson or learning activity.

These directions are intimately linked to the online format of the course. Administrative evaluators for face-to-face courses seldom need guidance about determining the people with whom it is appropriate to conduct the review session, differentiating between teaching behaviors and course materials, and the length of the observation period. These and other challenges are addressed more fully below. The existence of separate administrator-observation instruments—however open-ended—is an opportunity for opening the conversation about what behaviors constitute good teaching practices, what evidence of those behaviors can be observed, and how those behaviors can be quantified and evaluated (rather than merely noted as existing or not).
Observational Bias

Before we can create an instrument to evaluate teaching behaviors toward retention and promotion, we must confront several myths about the observable qualities of good teaching. The administrative-observation instruments developed for face-to-face teaching typically share some common observational biases, which are invisible until we start thinking about shifting the modality of teaching from face-to-face to online.

Bias 1: Good Teaching is Embodied

In the scenario that opened this white paper, the department chair was skeptical as to whether it would be possible to observe instructor enthusiasm in the faculty member’s online course, worrying that “the students can’t see the professor or hear his voice.” The bias inherent in the question is that body language and voice inflection are integral to effective teaching. While it is true that varied voice inflection and open body language help to keep face-to-face learners engaged (Betts, 2013), such indicators are not the only means of demonstrating instructor involvement with class participants.

For online courses that incorporate video of the instructor, another bias is revealed. Evaluators may wish to observe online video content in the same way they would observe a face-to-face lecture. Evaluators with an embodied-teaching bias may be both swayed by professional-style production values in longer lecture-capture-style videos and disappointed by brief “bare bones” videos of instructors discussing course concepts. Flashy presentation skills can mask a lack of instructor subject knowledge even in a face-to-face environment, and chunking of video content is an established best practice for course-related multimedia regardless of the course-offering modality.

By expanding beyond the bias, we can see that the communication between the instructor and the learners is the key measurement here, especially with regard to its frequency, nature, and quality. Administrators can think of all of the signals that face-to-face instructors send to their students, and they can look for similar kinds of signals in online courses, such as the frequency of instructor posts to discussion boards and the regularity of follow-up communication with learners about posted video content.

Bias 2: Good Teaching is Intuitive

The department chair in this white paper’s narrative is lucky. At least his department has an instrument from which to begin the conversation about observing online teaching. In many cases, the evaluation of face-to-face teaching is based on the subjective feelings of the administrative observer. Even where there are score sheets, rubrics, or other observation instruments, the questions asked sometimes do not lend themselves to quantifiable responses.

Using “I know it when I see it” as an observation criterion exposes a bias for the observer’s own learning preferences. Administrators who themselves learned best in lecture courses will rate lecturers as more competent teachers than instructors who favor other teaching practices. This bias exists in face-to-face observations, and it persists even when departments use specific instruments as guides to the observation.

The impact of the bias is magnified when observing online courses: The department chair’s concern that “the students can’t see the professor or hear his voice,” is also a coded way of saying that he can’t see the professor or hear his voice, either. Especially when administrative evaluators’ experiences have been primarily as classroom-based instructors, they lose some of their ability to use an “I know it when I see it” gestalt to judge instructor quality when the course modality moves from the classroom to an online environment.

To expand beyond this bias, administrators can shift their thinking away from charismatic traits (e.g., ability to hold students’ attention, strong classroom “presence,” and student eagerness to be involved in the class) and toward the support-behavior analogues to those charismatic behaviors (e.g., providing multiple ways for students to consume course content, reaching out to every student with a personal communication at least once per unit, and supporting student achievement by recognizing effort, milestones, and accomplishments).

Bias 3: Good Teaching Happens in Real Time

Questions often raised by administrators unfamiliar with online teaching include “how does one hold class online,” “does everybody log in to a live video feed, or something,” and “where do the students go to actually have a
conversation with the instructor?” There is a strong bias toward synchronicity as a hallmark of effective teaching. While online teaching can happen synchronously (e.g., via Skype or Adobe Connect real-time class meetings), one advantage of online learning is its any-time, any-place nature.

While it is true that a real-time conversation provides instructors and students with the opportunity to explore issues together and have immediate feedback within the conversation, it’s not the case that every course member can be involved in a synchronous class meeting at the same level. In many face-to-face classrooms, it is only the instructor and a small core of students—between five and ten students, regardless of class size—who are engaged in the class discussion at any given time (Weaver & Qi, 2005). Many students remain silent throughout the entire class period.

Administrative evaluators can move beyond the real-time communication bias by focusing on opportunities for students’ participation in, and their direction of, the learning experience, as well as the instructor’s ability to engage students both through the course content and through ad hoc interactions with students throughout the course. In fact, this ability to engage directly, one-on-one with learners asynchronously is a teaching behavior unique to online teaching. For example, online discussion forums offer all students the chance to reflect on the ideas and statements of others and offer instructors the opportunity to facilitate student learning in a dynamic environment. Administrators should look for evidence of teaching practices that invite learners and instructors to share and shape the conversation through such discussions, collaborative group work, and the like.

**Bias 4: Good Teaching Appears Effortless**

Readers of this book who have taught for many years may remember the very first time they taught. It was likely a nervous time, preceded by a lot of preparation. Often, we entered the classroom with a legal pad filled with information and notes, or with a PowerPoint presentation bristling with notations and resource links—reminders for ourselves of the things about which we did not want to forget to talk with the class. Over time, as we taught the same kinds of courses again and again, that legal pad got put aside in favor of an index card with a few key phrases or bullet points to remember. Some of us now have retired the memory aids all together and rely on our experience and memory in order to facilitate each class session.

Theatricality, or the appearance of effortlessness, is the most common mental shortcut that administrators use to stand in for “effectiveness” in face-to-face teaching. Administrator-observers are often biased toward the faculty member whose ability just to “wing it” from memory indicates mastery of the subject and comfort with the processes of sharing it with learners. In online teaching, however, instructors are brought back to the legal-pad stage of their teaching: much of what instructors typically speak and perform in face-to-face classes ends up as documentation in the online environment—and is thus not observed as an online teaching practice.

Further complicating this bias is the situation that in online courses, the person who designed the course outline, lecture content, assessments, videos, and initial discussion prompts may not be the person who is teaching the course. To the biased eye, this suggests that all that is needed to teach online is a warm body, one who can occasionally answer student questions, grade the tests and quizzes, and report on student achievement at the end of the course.

In order to work against the sage-on-the-stage bias, administrative evaluators should avoid confusing information delivery with teaching behaviors. Observers should define ahead of time what behaviors are to be evaluated as online teaching practices. One of the most common forms of face-to-face information sharing, even today, is lecturing. In an online environment, the lecture content (whether text, audio, or video) is more a source of information delivery, akin to the textbook readings in a face-to-face course: it’s a piece of media to be consumed by the learners in their own time, rather than an interaction to be shared with the class together. While it is important that media elements in online courses be expertly created, it is the delivery of the online course—the “teaching”—that is key to administrative reviews conducted for staffing and promotion decisions. We will discuss this distinction between content media and interactive experiences again later.

**Equivalence**

Especially when administrative observation of teaching occurs for the purpose of determining whether to re-hire or promote an instructor, the overarching goal is to make the observation process as standardized as possible: to observe each instructor under conditions as similar as possible to those used to observe his or her peers and to
evaluate instructors using a common set of criteria. Hence, it is tempting to want to create a comparative table of equivalences between face-to-face and online course delivery. If one observes 90 minutes in a face-to-face course, where (and to what extent) should one look in an online course environment to see the same amount of teaching happening?

This would be a much shorter book if such a goal were possible to achieve. Part of the confusion about observing face-to-face and online versions of the same course has to do with the visibility of the content and behaviors that fall within (and outside of) the scope of what can be seen by the observer. For example, in a face-to-face class, the administrative observer typically does not come to the instructor’s office hours to observe one-on-one interactions with students, nor does the observer review a sample of the instructor’s e-mail communication with students. The observer does not typically ask to see the instructor’s notes for the class period. The observer may get copies of assignments or in-class worksheets only if the instructor shares them with the observer—and only then so the observer can follow along with the activities taking place in the classroom. Furthermore, the observer does not usually request a copy of the syllabus before the observation takes place or see samples of student work that is handed in during the class being observed.

In an online course, however, the observer has access to all of these elements, and often more. He or she can see the course syllabus, the lecture content and multimedia for every unit of the course, students’ interactions with the instructor in the threaded discussion forums, and even student submissions for assignments and sample instructor feedback on these (when provided to the reviewer), as well as the grade book that the instructor is keeping for the course. In fact, pretty much the only element of the educational transactions for the entire online course that remains invisible to an administrative observer is the flow of e-mail between students and instructors (and that can even be made available in many cases).

What is Unique about Administrator Evaluation?

Because of these differences in visibility and access between face-to-face and online courses, it is helpful to re-examine some general online-course-review strategies through the lens of what actions administrators can take that other reviewers cannot.

For example, a department chair can do the following:

• Phone or e-mail current students to follow-up on the observation  
• Look up past-performance data on current students’ previous courses  
• Compare observation data from the instructor’s previous classroom and online-course visits  
• Recommend (and often enforce) instructor remediation actions for noted challenges  
• Provide incentives for improved teaching practices, retention, and student satisfaction

All of these actions take place outside of the observation itself, and administrative observers are in a unique position to be able to integrate the observation of online teaching practices into an overall program of feedback to the instructor. Thus, when administrators are the observers, they should employ the process that follows.

Step 1: Define Behaviors

Instead of looking for specific behaviors or affective elements of the instructor (such as “speaks clearly” or “maintains the interest of students”), administrative observers can find modality-neutral, measurable criteria for evaluation by focusing on the effects of instructor behavior. For example, “the instructor communicates in a way that students respond to throughout the range of observation.” By observing the behaviors of the instructor for what those behaviors elicit from the learners, administrative evaluators can make a yes-no determination, and further assign a measurable value to the behavior. In their seminal article, “Principles for Good Practice in Undergraduate Education,” Chickering and Gamson (1987) analyzed a wealth of research on good teaching in colleges and universities.

They revealed seven core principles of effective teaching practice that are themselves modality-independent:

1. Encourage student-faculty contact
2. Develop reciprocity and cooperation among students
3. Use active learning techniques
4. Give prompt feedback
5. Emphasize time-on-task
6. Communicate high expectations
7. Respect diverse talents and ways of learning

By seeking instructor behaviors that help to meet each of these core areas, administrative observers can tailor their observations to the tools and methods being used, regardless of the course-offering modality. For online courses, especially, focusing on Chickering and Gamson’s principles allows administrators who may not have taught online themselves to look for evidence of effective teaching interactions throughout the online environment: everything that is not an interaction can be seen as a piece of media.

By categorizing elements of online courses as either media or interactions, administrative observers can make fine-grained determinations about which parts of the online course are actually examples of teaching behaviors. The following chart illustrates one way to match teaching principles against commonly-observed teaching behaviors in online courses.

Table 1.

<table>
<thead>
<tr>
<th>Teaching Principle (Chickering &amp; Gamson)</th>
<th>Common Online Teaching Behaviors</th>
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<tbody>
<tr>
<td><strong>Encourage Student-Faculty Contact</strong></td>
<td>• Set aside regularly scheduled times for online “office hours” or implement a maximum turn-around time for responses to communications.</td>
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<td></td>
<td>• Facilitate regular course discussions.</td>
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<td></td>
<td>• Post course announcements or news updates on a regular basis.</td>
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<tr>
<td><strong>Develop Reciprocity and Cooperation Among Students</strong></td>
<td>• Assign group or dyad projects.</td>
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<td>• Require discussion responses to peers.</td>
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<td></td>
<td>• Offer encouragement in public ways (e.g., on the course discussion forum); offer criticism privately (in grade-tool feedback seen only by individual students).</td>
</tr>
<tr>
<td><strong>Use Active Learning Techniques</strong></td>
<td>• Ask students to summarize and propose next steps.</td>
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<td></td>
<td>• Assign “butts out of seats” tasks to give online learners tasks away from the keyboard (e.g., interview experts near students’ homes) and ask students to report back to the class.</td>
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<tr>
<td></td>
<td>• Have students create and post study guides.</td>
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<tr>
<td><strong>Give Prompt Feedback</strong></td>
<td>• Respond to each student at least once in each graded threaded discussion topic, or for very large courses, at least once per course unit.</td>
</tr>
<tr>
<td></td>
<td>• Keep to turn-around time expectations for instructor responses to graded work.</td>
</tr>
</tbody>
</table>
• Give students encouragement, reflection, and correction feedback.

**Emphasize Time-On-Task**

• Give students estimates of how long assignments will take.
• Communicate progress of the whole class toward week/unit goals.
• Provide individual-progress milestones for graded work.

**Communicate High Expectations**

• Give preview, status, and review communications.
• Provide samples of good practice on assignments & discussion.
• Spotlight students who do good work or improve their efforts (e.g., post an “everyone look at Kevin’s response” message in discussions, or ask improved students to lead group study sessions).

**Respect Diverse Talents and Ways of Learning**

• Provide multiple ways for students to respond to assignments (e.g., write an essay, record an audio response, create a video).
• Allow students to respond to discussions using a variety of media.
• Present learning material in a manner that allows for a range of possible learning paths.

### Step 2: Agree on the Scope of the Observation

There is no hard and fast equivalent in an online course to the 60- or 90-minute period typical of face-to-face observations. Because face-to-face courses are fixed in time and place, those parameters are the “givens” of the observation. The givens for online courses are not time or physical location (both of which are variable), but the online environment itself.

In order to assist administrators who are observing online courses, agreement should be reached on five key factors:

• Definition of Teaching Practices
• Communication between Observer and Observed
• Which Elements are “In Bounds”
• Duration of the Observation
• Assistance Available to the Observer

**Definition of Teaching Practices**

In an online course, there are many analogues to face-to-face teaching practices that may not be considered “teaching” for the online course. For example, in a face-to-face class, lecturing is a key teaching practice. However, video clips or lecture notes in an online course are part of the course media, and are not themselves direct evidence of teaching behaviors—especially if the person who developed the lecture notes or videos is not the person facilitating the class.

As mentioned earlier in the discussion of the “effortlessness bias,” one strategy for making clear what counts as a teaching practice in an online course is to examine those elements that lead directly to interaction among the students, instructor, and course content. Items that present information but do not then directly ask the learner to respond may be considered as parts of the course design. Course content items may be either design elements or teaching practices, depending on their structure and use.
For example, a set of lecture notes that is presented as a single web page, and which presents information—in the manner of a textbook or article—is part of the course design, and would not be considered in an administrative observation of the online course. Likewise, videos, audio podcasts, and the like are also as part of an online course’s materials, and do not “count” as observable teaching behaviors.

However, if an instructor responds to student questions in an online-course discussion by posting a min-lecture or video to explain a concept, that certainly “counts” as an observed teaching behavior, because the content is created or shared as a result of interaction between the learner and the instructor. The overall question to apply is one of information presentation versus interaction. As a final caveat, items that were created by a person other than the course instructor should never be counted toward administrative observation of online courses. This leads to the second area needing agreement: communication.

Consistent instructor presence in an online course is one of the most important components of online teaching practice, helping students feel less isolated and more supported in their learning. In fact, instructor presence supports each of Chickering and Gamson’s seven principles. In online instruction, where another course or even institution is just a click away, instructor presence goes a long way toward student retention, academic success, and building a sense of community. Piña and Bohn (2014) identify specific behaviors unique to the online environment that administrators perceive as effective indicators of teaching quality.

Our desire was to identify a set of criteria that would yield objective data easily examined by supervisors and peers during an online course observation and serve as a balance to the more subjective data gathered from student surveys.

This study focused upon quantitative measures of instructor actions and behaviors that could be readily observed in the online course and/or collected using the reporting tools of the learning management system:

- Has the instructor logged in at least an average of every other day?
- Has the instructor posted a biography of at least a paragraph, in addition to contact info?
- Has the instructor posted announcements at least weekly?
- Is there evidence that the instructor answers student inquiries in two days or less?
- Does the instructor participate in discussion forums where appropriate?
- Does the instructor provide feedback on assignments?

Communication Between Observer and Observed

For face-to-face classes, the usual communication that takes place prior to the observation is to let the instructor know that he or she will be observed on a given day and time. Perhaps the observer asks for a copy of the course syllabus or for any handouts that will be provided to the students. There is typically little communication between the observer and the instructor during the actual observation.

For online courses, similar needs arise: the observer must still notify the instructor that observation will take place. Instead of requesting copies of documents (which, de facto, may be accessible during the online observation), the observer will want to establish whether the instructor is also the author of the course content. Likewise, the instructor may communicate ahead of time to the observer about where the observer may wish to focus attention or about anything unique regarding the context of the instruction, especially if there are interactive elements in the online course environment that are in different places than, or go beyond, the usual places where interaction occurs.

A further difference for online courses is that communication, in the form of clarifying and directional questions, is often beneficial during the observation period. For example, the administrative observer may want to see supplemental content that is released to students only after they accomplish various course tasks (and which the observer is unable to complete in order to unlock). This brings up the next area where agreement is needed: the extent of the observation.
Which Elements are “In Bounds?”

Agreement on which elements of the online course represent teaching practices is often the most contentious discussion on a campus, since many elements may be considered part of the course design or teaching practices, depending on their structure and function, as seen in the example of lecture content above. However, it is possible to create a core agreement that identifies elements of online courses:

- that are always counted as teaching practices (e.g., discussion forums, group-work areas, and feedback on student assignments);
- that may be counted as teaching practices, depending on structure and interactivity (e.g., supplemental materials, spontaneous “mini lectures,” news/announcement items); and
- that are never counted as teaching practices (e.g., pre-constructed lecture content, graded tests/quizzes, major course assignments, links to web sites, and content created by third parties like textbook publishers).

A secondary concern about the scope of what administrative observers may use for evaluation has to do with the boundaries of the course-delivery environment. Many instructors, whether teaching face-to-face or online, perform teaching actions outside of formal instruction. For instance, instructors in both face-to-face and online classes may meet with students for office-hour consultations and engage in student consultations via e-mail and telephone calls. In the face-to-face environment, such contact, although it definitely meets the definition of “teaching,” is not counted toward administrative observation because it is not readily visible and measurable to the observer.

However, in the online environment, these behaviors may or may not be visible, depending on the technical setup used at the institution. In institutions where the course delivery environment includes text-based “chat” and synchronous-environment features, faculty office hours may be recorded and stored in logs accessible to the instructor and/or students in the course. More commonly, many instructors have a “Q&A” or “water cooler” topic in their online discussion forums that is intended for general questions about the course—but such discussion topics are almost never a required element of the course design.

One way to resolve the question of where observers may look is to think about the boundaries present in both face-to-face and online class observations. In a face-to-face class, the boundary is the classroom itself. Interactions that take place outside of the physical location of the classroom, including office-hour consultations, phone calls, and e-mail messages, are not counted toward the observer’s evaluation. An easily-defined boundary in online courses would be to consider excluding those same types of outside-of-formal-instruction communications from the observation and evaluation process.

Consider that a discussion of where to draw the boundary lines will result in different combinations of interactions being “in play” at different institutions, and may even result in some interactions coming into consideration when a change is made to the institution’s course delivery environment that adds new features. For example, if an institution adds a synchronous-online-classroom software feature to its course environment, then logged recordings of the use of that feature would come into the scope of what is possible to be observed.

One final word is necessary about the level of access granted to the observer. In most online course environments, observers can be granted student- or instructor-level access to the environment. The best practice is to allow administrative observers student-level access to online courses, unless there is a compelling reason for access to an instructor-only area of the course. Agreement on this point, and a process for making the request to see instructor-access parts of a course, are best made in advance of the observation. Such agreement helps to keep the focus of the observation on the interactions accessible to students.

Duration of the Observation

For face-to-face courses, the temporal boundary of an administrative observation is well defined, usually one class-meeting period. The observer spends 50 to 90 minutes watching the class unfold in real time. The challenge for observing online classes is that the observer’s time spent examining the online environment does not correlate directly to the amount of time spent observing a face-to-face class covering the same scope of ideas and content.
The best practices for defining the time period for observation are to allow the evaluator access to the online course environment over a set period of days, and to communicate time-spent expectations up front. For example, Penn State University advises evaluators to conduct their reviews toward the end of the semester, so that there will be a rich and complete set of interactions to evaluate. If observations take place too early in the course, there may not yet be a lot of teaching behaviors in evidence. At Penn State, administrative evaluators are also told that the observation instrument was designed to take approximately two hours to complete. Communicating time-spent expectations helps observers to know how much attention and detail is required for completing a thorough observation, allows observers to focus on the must-observe areas of the course environment, and offers an opportunity for evaluators to examine other areas of the course environment to determine whether they fall into the “leads to interaction” category.

Assistance Available to the Observer

In the face-to-face classroom, there is little concern about the observer’s required technical skills. He or she arrives at the classroom, and takes notes about the class. For online courses, however, administrative observers may not be skilled at navigating the online course environment, or may need technical help in observing various elements in the online course. Agreement about the availability, extent, and role of technical staff is needed prior to the observation.

If administrative observers of online courses require “Sherpas” who will guide the observation process, first determine from what area(s) of the institution the technical assistants should come. For example, retention, tenure, and promotion observations may be facilitated by staff members from the teaching-and-learning center. Center staff have to draw a “bright line” about being able to answer process-related questions when assisting administrative observers, leaving the domain of “what to observe” squarely in the hands of the administrative observers.

Further, the role of the technical assistant should be defined. The continuum of assistance can range from fully-embedded (where the assistant is at the keyboard all the time, and takes direction from the administrative observer) to consultative (where the administrative observer is at the computer and the assistant offers verbal help) to on-call (where the assistant is not initially involved in the observation, and is brought in only if the observer requests help).

A final concern about assistance for the administrative observer is to make clear that any assistance offered is facilitative in nature and not evaluative. For instance, a technical assistant may show an evaluator the discussion forums in a given online course and may mention that the instructor appears to be responding to students at the rate of about one message per ten student messages. The assistant should not, however, provide evaluative or comparative advice during the observation, such as saying that a good benchmark for instructor postings is to post between ten and twenty percent of the total number of messages in online discussions. This can be challenging for assistants who are, outside of the observation setting, resources for the institution on precisely these kinds of issues. In institutions where teaching-center staff members train administrators in the process of observing online courses, it is a good practice to source the pool of technical assistants from another campus unit, such as the information-technology area, to avoid potential conflicts regarding who is providing the evaluative response in an observation.

On Avoiding Quantity Bias

There is one factor in administrative evaluation of online teaching that is not typically encountered in observation of face-to-face classes, and which deserves separate consideration: quantity bias. The scenario presented in the “How to Fool an Administrator” callout box shows that an observer, particularly one who has not taught online himself or herself, can be tempted to equate several non-related factors with the quality of the online course experience for students. These factors include the amount of content in the online course environment, the amount of multimedia used in the course, or the number of communications from the instructor.

As has been emphasized in this white paper, the primary means of avoiding quantity bias is to focus exclusively on the interaction among the students and instructor. Items that get students to take actions, as opposed to items that are to be consumed passively by reading or watching them, are those that can be evaluated for administrative observations. It is safest to evaluate only the “spontaneous” aspects of the course and not the “canned” materials at all.

Deans and department chairs can assume that each instructor has created his or her the entire collection of course materials. However, the instructor of any given course might not have authored the content and may not have had
any control over the presentation of the materials. Likewise, instructors might have inherited the structural aspects of their courses from someone else who authored the content. By focusing on just the interactions between students and instructor, as well as on the instructor’s facilitation of student-to-student interactions, evaluators can get a true sense of how well online courses are being taught. This points to three take-away lessons:

- **Consider student interaction load.** Estimate the amount of effort being asked of learners in the unit or week under evaluation. In a 3-credit course during a 15-week semester, the total effort asked of students typically ranges between 6 and 10 hours, including in- and out-of-class work (SACS COC, 2012). Give higher evaluative credit to instructors who interact more often with students as part of the student workload. For example, instructors may ask students to report on assignment progress, provide feedback on collaborative student work, and take an active part in guiding course discussion threads.

- **Evaluate required and optional elements.** Look at the structure of the communications between the instructor and students (e.g., discussions, news/announcements, stop-and-do exercises). Regardless of whether they are required, must students “stumble across” them in order to move ahead? For example, are thought exercises and “switch your thinking” practice messages interspersed by the instructor among the discussion messages posted throughout a unit or week?

- **Look for a balance of planned and just-in-time communication.** Provide higher ratings to online courses where the instructor posts regular communications, such as unit introductions, milestone-achievement messages, and roundup/review messages. In addition, look for just-in-time communications that respond to student requests for assistance and provide praise and correction for individual students. It’s possible to have an entire online course “in the can” and post only pre-written messages—the equivalent of the same-lectures-every-semester prof who reads from fifteen-year-old notes. Evaluate the quality of instructor feedback on student work using Chickering and Gamson’s principles (e.g., the instructor communicates high expectations, gives prompt and meaningful feedback, and respects diverse talents and ways of learning).

Especially in online courses, it can be tempting to equate greater quantities of interaction with better course experiences. Be sure to take into account the number of students in the course when evaluating the number of instances of interaction seen in the online course environment, as well.

**Looking Beyond the Administrator**

This white paper has focused on best practices for converting the traditional face-to-face model of an administrator observing a classroom into a way for administrators to observe online teaching practices. There are many other models for observing online teaching practices, however; many move beyond the traditional participants:

- An administrator observes an instructor.
- The institution hires full-time teaching-practice evaluators.
- Administrators delegate the observation task to faculty peers or to department staff members.
- An instructor seeks out a peer or a professional staffer to observe his or her teaching practices.

In all of these cases except the first, the observer is not the department chair or dean, and likely has a different level of access to—and authority over—the instructor being observed. The goal of summative observations (the kind that lead to employment decisions like promotion, re-hiring, and salary adjustments) is to rely on a representative sample of the teaching that individuals do in order to arrive at a fair and balanced judgment. By making administrators more comfortable with where and how to look at online teaching, we increase the frequency of online-teaching observation to match its frequency in the teaching offerings at our institutions. Where faculty members teach 50% or more of their course load online, half or more of the observations of teaching should be in the online environment, as well.

**Conclusion**

At that large public university in the midwestern United States, when the technology coordinator finally met with the department chair to help prepare him to observe the faculty member’s online course, the coordinator came with a proposed plan to help him to narrow down the work that they would need to do before, during, and after the
observation. The plan included specific requests that the department chair would be able to make of the faculty member prior to the observation, such as getting a copy of the course syllabus and any supplemental materials.

The coordinator also suggested that the chair observe a single unit of material—one that had already been completed—so he could get a good feel for the overall experience of being a student in the course. Finally, the coordinator set up time to give the department chair a general introduction to the university’s online learning environment, so he would know what to expect and be better able to decide where to look within the environment to observe the various criteria in the department’s observation rubric. The department chair left the consultation feeling better prepared, and confident that the teaching center’s staff would be there to support the observations.

A Thought Exercise

With a pen and paper, think for a few minutes about the administrative-observation situation at your own institution. Who currently observes classes from an administrative point of view, and for what purposes?

Common Purposes:

- To evaluate teaching practice regularly
- To address a reported issue or classroom concern
- To evaluate teaching performance toward an award or promotion

Also, write down the scope of the current observations that take place:

- How many class periods are covered?
- What communication, materials, and access are provided to the observer before, during, and after the observation?

Now that you have an outline of your current administrative-observation program, think of the observable criteria for evaluating good teaching practices (per Chickering and Gamson, above).

- How does your current system map onto those criteria?
- Would adopting an administrative-observation protocol for online courses entail a re-examination of your institution’s current face-to-face observation protocol, as well?

To wrap up this thought exercise, predict what resources you would need in place in order to make administrative observations consistent, no matter the modality in which they are performed. For example, if online-course observers get to ask for supplemental materials and a copy of the syllabus, the same should apply for face-to-face observations. Collect your notes into a list of core elements, and begin the conversation with your colleagues.

References


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Growth Management of Distance Graduate Programs: Balancing the Scales Strategically

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Abstract

Managing growth effectively in distance education (DE) programs provides opportunities for recognition, partnerships, and collaboration. Through a brief review of literature, this paper will identify the increased demand of distance learning education options, next the paper will provide best practices for effectively managing growth in DE programs based upon two graduate programs, and the paper will conclude with solutions for program administrators who find it challenging to balance the demands of growing programs.

Introduction

The increased demand for online higher education opportunities is a world-wide concern (Vasilevska, Rivza, Pivac, Aleknevičiene, and Parlińska, 2017). Exploring options to do more with fewer or the same resources can create frustration when working to implement changes to programs in support of significant growth. Program growth is indicative of a successful program, one that provides structure, and one that maintains resources for student success.

Brief Literature Review

Hoskins (2011) points out evidence of national support of the growth of distance education through a plan issued by the U.S. Department of Education’s office of Education Technology. The plan, identified as a National Education Technology Plan, outlined the importance of using technology to meet the expectations of delivering engaging opportunities for secondary students to learn. Hoskins further shares that “distance and continuing education practitioners must continue to lead the paradigm shifts to more active, engaged, and collaborative learning systems” (p. 4). As graduate faculty who teach and lead online programs, responsibility lies upon us to ensure the success of students whether they become researchers or practitioners; despite the demand of online education programs, ethical and quality programs should remain key in the development of expansion.

Vasilevska et al. (2017) share the impact distance learning is having in higher education institutions in countries around the world; the researchers found five major components can be critical in the success of students who participate in distance learning: adaptability, technical capabilities, computer literacy, self-control and motivation. These five components should be considered when expanding distance education programs. As programs experience an incline in the number of students served, program expansions should take into consideration that students should be prepared with the critical qualities identified.

Describing the growth of distance education programs as an “explosion”, Carnevale (2004) predicted that the demand would continue over a ten-year period (p.1). It is now 2018, over a decade later, and colleges have experienced increased enrollments along with expectations to manage the vastly growing technology used to support this type of learning environment. Carnevale (2004), explained that “colleges that don’t choose to buy packaged courses and find they cannot keep up with the other institutions’ offerings could be the early victims of a distance-education shake out that some observers say is sure to come” (p. 1). If institutions are resolving to create and sustain
online opportunities for students, how do they keep up? This paper offers the perspectives of faculty who have
designed and managed distance education graduate programs for over a decade.

**Best Practices for Program Growth**

This paper explores two graduate programs that have seen an increase in demand over a period of five years. One
program is an online master’s degree program in a college of education, which has seen a program growth of 250%
in the past two years, the other is a distance doctoral program which has doubled in the number of students served
within the last four years.

Coordinators of these programs have noted best practices, and once incorporated, made for a more efficient and
successful program.

**Best Practices for the Online Master’s Degree Program:**

- Rolling admissions
- Professional Development for part-time and full-time faculty
- Engaging students with peers through use of online tools such as FlipGrid
- Have a course planner so that students can work through a rough draft of the program
- Integrate businesses to provide guest lectures, internships, job shadows, and client projects
- Integrate software that will be used on the job after graduation
- Link industry competencies with class assignments so that skills gained are useful in practice.
- Market and recruit with local industry and organizations.
- Partner with local organizations.

**Best Practices for the Distance Doctoral Program:**

- Team teaching
- Split the semester in half; offer one course for the first 8 weeks of the semester, offer a second course for
  the next 8 weeks
- Seek the support of grants for structuring additional program services (internship and mentoring
  opportunities for students)
- Involve external stakeholders
- Evaluate resources to determine if cuts can be made, which may in turn support a new position
- Seek support from the institution by hiring graduate students for support as teaching assistants
- Assess recruiting efforts to increase applicant pool
- Partner with nationally recognized organizations

**Challenges and Solutions for Program Growth**

With program growth comes challenges; challenges experienced in the programs referenced in this paper can be
categorized into two areas: the need for increased funding to support hiring additional faculty and support, and an
increased workload for faculty as well as for administrative support. Solutions to the challenges faced were due to
multiple exchanges of ideas and meetings. External stakeholders offered suggestions for the management of
supportive services to students, grant funding was sought to support the work of faculty, and utilize available
resources to their full extent. As noted above, several best practices provided a fluid approach to managing the
growth.

**Conclusion**

The National Education Technology Plan explains how “professional educators are a critical component of
transforming our education systems, and therefore strengthening and elevating the teaching profession is as
important as effective teaching and accountability. All are necessary if we are to attract and retain the most effective
educators and achieve the learning outcomes we seek. Just as leveraging technology can help us improve learning
and assessment, it also can help us shift to a model of connected teaching”; this will be a key component of
In moving forward with the development of successful and engaging online programs it is especially vital to assess the course as well as the learning that takes place. Chapman and Stone (2011) explain how the focus of developing online programs has primarily been placed upon course design and that online learning presents opportunities for evaluation; course evaluation and measurement of learning outcomes can be helpful in predicting the need for change as programs grow.

References


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